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THE
ENCYCLOPEDIA
OF
PURE MATERIA MEDICA
A RECORD OF THE
POSITIVE EFFECTS OF DRUGS UPON THE HEALTHY
HUMAN ORGANISM.

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ENCYCLOPEDIA

OF

PURE MATERIA MÉDICA.

TILIA.

Tilia Europæa, Linn.

Natural order, Tiliacæ.

Common names, Linden, Linde.

Preparation, Tincture of the fresh blossoms.

Authorities. Austrian provings, *Æst. Zeit. für Hom.*, vol. 4, part 2, p. 380, provings made at different seasons of the year; 1, E. H. Froelich, took an infusion of 2 drachms of the dried flowers; 1 *a*, same, took on two successive days 3 drops of 1st dec. dil., afterwards 20 drops; 1 *b*, same, took 6th dec. dil. in water; 2, Th. K., took 3d dec. dil.; 2 *a*, same, took 3 drops of 6th dec. dil. (first and second days), and at subsequent times; 3, F. G., took the tincture prepared from the fresh blossoms, 10 drops, afterwards 20 drops; 4, J. O. Müller, took 10 drops of the tincture in water; 4 *a*, same, took 10 drops of 1st dec. dil., afterwards same dose, subsequently 20 drops; 4 *b*, same, took 10 drops of 3d dec. dil., twice, subsequently 60 drops; 4 *c*, same, took 10, then 20 drops of 6th dec. dil.; 4 *d*, same, took 10, afterwards 20 drops of 30th dil.; 5, K. P., took 10 drops 1st dec. dil.; 5 *a*, same, took 3 drops of 3d dil.; 6, E. K., a child, took 1 drop of 1st dec. dil. in water; 7, B. S., took 10, and afterwards 20 drops 1st dec. dil.; 7 *a*, same, took 60 drops 3d dec. dil.; 7 *b*, same, took 20 drops of 6th dec. dil.; 7 *c*, same, took 20 drops of 30th dil. (first day), 10 drops (third day), 20 drops afterwards.

Mind.—Towards morning she was tormented by a rush of pleasant thoughts, which changed to a weeping mood; through the next day she was peculiarly irritable, and inclined to quarrel, with confusion of the head, with a tense accelerated pulse and increased warmth of the body, especially of the cheeks.^{2a}—Lovesick; all his thoughts centred upon an ideal woman; in this revery he was possessed by a sweet melancholy, which it was impossible to describe; every earthly sense seemed far away.³—Earnest, reflective mood (first day).^{4a}—Sad, weeping mood (first day).⁷—Sad, melancholy mood (second day).^{4a}—Apprehensive mood (second day).^{4b}—He cannot remain in the house on account of a sensation of apprehension and anxiety; the room seems too close, he is obliged to go into the open air, in the evening, when he feels better (first day).^{4a}—Extremely depressed after

dinner (second day),^{4a}.—Great depression of spirits the whole forenoon (third day),^{4a}.—[10.] Despondent (first day),^{4a}.—Despondency after dinner (second day),^{4d}.—Depression of spirits,^{3 4a 4b}.—Dread of society (second day),^{4a}.—Discontented with his condition (first day),^{4a}.—Unusually fretful mood (second day),³.—Fretful, quarrelsome, peevish (third day),^{4a}.—Irritable mood, inclined to get angry, in the morning (second day),¹.—Irritable, quarrelsome mood after dinner (third day),^{4d}.—Irritable, critical mood, inclined to quarrel and get angry, even from the slightest difference of opinion (first day),^{4d}.—[20.] Disinclination to work (fourth day),^{7c}.—Thoughtfulness (second day),^{4d}.—Stupidity,^{2a 4b}.—An intoxicated and stupid condition, with mental oppression (second day),⁴.

Head.—**Confusion and Vertigo.** Confusion of the head, which seemed too large, in the morning (second day),¹.—Dizzy confusion of the head, with dimness of vision (after a few hours),^{4a}.—Dizzy confusion of the head, with slight drawing pain in the right half of the forehead (third day),^{4a}.—Confusion, heaviness, and obscuration of the head, so that he could think and speak clearly only with great effort (third day),^{4b}.—Violent dizzy confusion of the head, with pressure on the chest,^{4c}.—Confusion of the head, and so great dizziness that he feared he would lose his consciousness,^{7c}.—[30.] Dizzy, intoxicated confusion of the head, with heat of the face, with redness of the cheeks, soon,^{4d}.—Persistent intoxication of the head, with tearing drawing or sticking pains, here and there,^{7b}.—Intoxication and nausea in the stomach,^{4c}.—A feeling of intoxication in the head (first day),^{4a}.—Vertigo, as if intoxicated, during which she seemed to turn in a circle, so that she was obliged to sit down (soon),¹.—Dizziness,^{4c}.—Vertigo, all objects seem to waver (third day),^{4b}.—Paroxysms of vertigo, with heat of the face,^{4c}.—Vertigo, with dimness of vision by paroxysms,^{7c}.—Vertigo, with such great exhaustion that he was obliged to take hold of objects to steady himself (second day),^{4b}.—[40.] Transient vertigo, with vanishing of vision, in the evening; in order to see distinctly she was obliged to wink repeatedly, in the evening (first day),^{7c}.—Transient vertigo and obscuration of the head,³.—Slight vertigo while walking in the open air, with obscuration of the eyes (soon),^{7b}.—She seems to lose the freedom and steadiness of her movements, and staggers on attempting to stand up; as the vertigo passes off a painful dulness of the head comes on (first day),⁷.—**General Head.** Dulness of the head,^{1a 4c 4d}.—Dulness of the head, the whole forenoon (second day),¹.—Dulness of the head in the morning, increased by the warmth of the room to a pressive pain (third day),¹.—Dulness of the head, in the morning (third day),².—Painful dulness of the head, at times in the occiput, at times in the forehead (first day),^{4d}.—Dizzy, confused dulness of the head at 10 A.M. (third day),^{4d}.—[50.] Painful dulness of the head,^{7c}.—Fulness and heaviness of the head (third day),¹.—Stupefaction and painful dulness of the head, after dinner (second day),^{4a}.—Heaviness of the head,³.—Heaviness at night, and dulness of the head (first day)^{4a}.—Heaviness and dulness of the head at times (third day),⁴.—Headache increased in the evening, with a dull confusion in the frontal region, stoppage of the nose, and roaring in the ears (second day),³.—The head feels heavy, and as if screwed in,^{4c}.—The head felt hot and heavy, on waking at night (first night),⁴.—Woke about 5 P.M., from a sleep of three hours, free from the morning headache, with the exception of some fulness in the forehead, and slight dizziness and obscuration of vision (second day),¹.—[60.] Headache, accompanied by heat of the face, lasting through the night, till noon of the next day,^{2a}.—Painful pressive-drawing pains in the head, extending to-

wards the forehead (first day),^{4b}.—Violent drawing-cutting pain in the head, with photophobia and qualmishness, aggravated by the slightest movement, intolerable on making any effort, relieved by closing the eyes, and by cold applications, and by rest (third day),^{4b}.—Tearing pains through the brain (first day),^{4c}.—Tearing pains, here and there, in the head, face, and ears,³.—Cutting drawing, here and there, in the left half of the brain towards the forehead (second day),^{4c}.—Violent sticking pain over the whole head, with heat of the whole body,^{2a}.—Extreme sensitiveness of the head to a draught of air; even while walking in the house the current of air caused slight drawing and shivering in the scalp on the vertex,^{4c}.—Amelioration of the head troubles from coffee (third day),¹.—**Forehead.** The forehead feels obscured, as if constricted (third day),^{4d}.—[70.] Pressure in the forehead,³; (third day),^{4d}.—Pressive pain in the frontal region (second day),¹.—Painful pressure in the forehead, soon,^{4d}.—Pressive pinching pain in the sinciput (forehead and vertex), in the evening; this continued into the night, and was felt whenever awakened from sleep, by restless dreams (first night),³.—Pain in the forehead, just above the root of the nose, a pressing inward, as from a dull instrument (first day),^{4d}.—Slow wavelike drawings in the left half of the forehead, extending towards the frontal eminence (second day),^{4b}.—Fulness and tearing in the forehead, lasting till evening, then associated with great heat of the face,^{4c}.—Tearing pain in the forehead, with dizziness in the morning on waking, increasing after rising, relieved by washing with cold water,^{4c}.—Dull sticking burrowing in the right frontal eminence (second day),^{4b}.—Tearing, sticking pain in the right side of the forehead,^{4c}.—**Temples.** [80.] Temporal veins very much distended (second day),^{4d}.—Pressive pain in the temples, worse in a warm room, better in the open air; this headache reached its height about 1 o'clock; the pressure in the temples amounted to an acute pressing pain; the whole head was painful, heavy, dull, and confused (second day),¹.—Drawing in the left temple and side of the face (first day),^{4a}.—Transient tearing pain in the right temple,^{7b}.—Tearing in the right temple, and at the same time extending down the upper arm (first day),⁷.—Sticking pains from without inward, in both temples (first day),⁷.—**Vertex and Parietals.** Tearing in the right side of the vertex, transversely across the forehead, and along the left side of the face (first day),⁷.—Painful drawing in the left half of the head, rather towards the occiput, and down towards the face (second day),^{4a}.—**Occiput.** Heaviness of the occiput; it seemed as though a weight were seated in it; when the head is inclined forward this weight seems to sink lower down in the nape of the neck (first day),⁷.—A peculiar aching pain in the occiput, extending up towards the back of the head, after dinner (first day),^{4d}.—[90.] Pressure in the occiput from within outward, at the mastoid process (second day),^{4a}.—Broad pressure in the occiput,^{4c}.—Pressure and burrowing pain in the occiput,^{4c}.—Drawing pain in the fold between the occiput and the nape of the neck (first day),^{4a}.—Drawing in the occiput into the head and to the forehead, where it becomes a pressure,^{4c}.—**External Head.** Eruption of small gritty vesicles on the scalp, which itch excessively, with burning soreness after scratching (first day),^{4a}.—Itching on the scalp, obliging scratching (first day),^{4a}.—Itching on the scalp (second day),^{4a}.—**Eye.**—Eyes deep, hollow,^{7b}.—Eyes drawn backward (hollow-eyed), (third day),^{4d}.—[100.] Eyes thick and weak, seem swollen,^{4c}.—The eyes seem swollen and weak, as if one had been weeping,^{7b}.—Pressive pain in both eyes (second day),¹.—A transient sensation, as if a piece of cold iron

pierced through the right eye, causing burning (first day),⁷.—Stitches upon the outer portion of the eye, afterwards in them,^{1c}.—Itching about the eye,^{7a}.—**Lids.** Itching of the internal canthi, with weakness of sight (first day),^{4b}.—**Lachrymation.** Lachrymation (third day),^{7c}.—**Vision.** Vision obscured,^{4c}.—Paroxysms of dimness of vision, as if a mist were hanging before the eyes; in the afternoon these attacks recurred, the eyes seemed "thick and weak," as after a long sleep; it was an effort to see distinctly, and she was obliged to open the eyes as widely as possible (first day),^{7a}.—[110.] Dimness of vision, as from a veil (second day),³.—Mist before the eyes (soon),⁷.—Vision weak (third day),^{4d}.—Vision very weak, obscured (first day),^{4d}.—Weakness of sight, with obscuration of vision, soon,^{4c}.—Swimming of sight, with moist eyes,^{4c}.—The candlelight seems enveloped in smoke or vapor; the eyes are weak and tense, as after long weeping, or as if the white of an egg had dried upon them,^{4c}.—Flickering of the candlelight in the evening; all objects seemed to waver, and she was obliged to make great effort in order to see distinctly; when she looked with only one eye the vision was perfect; with both eyes objects seemed indistinct, and wavering; this disturbance of vision increased with the evening, so that at last small objects could not be seen at all,^{7b}.

Ear.—Tearing around the outer portion of the ear in the root of the concha, as if it would be torn out, in repeated paroxysms (fourth day),^{4d}.—Tearing in the margin of the right ear, as if the concha were being torn off,^{4c}.—[120.] Transient burning sensation, as if a piece of ice were drawn over the ear and face (first day),⁷.—Painful sensation of distension in the inner ear (fourth day),^{4c}.—Drawing in the left ear, as after taking cold (first day),^{4a}.—Heat and tearing, extending from within outward, in the right ear,^{4c}.—Tearing from within outward, in the left ear, with tearing in the left side of the head (second day),^{4a}.—Tickling in the right ear, as if something were running from it,^{4c}.—Sticking pain in the ears (second day),^{4b}.—Tearing and stopped sensation in the ears (second day),³.—**Hearing.** Ringing or dull roaring in the ears,³.—Transient ringing in the ears (third day),³.

Nose.—[130.] Sneezing (second day),^{4d}.—Frequent sneezing with chilliness (second day),^{4a}.—Frequent sneezing through the day (third day),³.—Much sneezing, with fluent coryza, and scraping in the throat,^{7c}.—At night he woke from a partial slumber, with sneezing, fluent coryza, and stoppage of one nostril (second night),³.—Clear thin blood from both nostrils, in the evening (third day),³.—Stopped sensation in the nose, which was dry (third day),².—Drawing pain in the root of the nose,^{4c}.—Barrowing pain within the nose,^{4c}.—Transient tearing pain in the nose,^{7b}.—[140.] Tickling in the nose (second day),^{4d}.

Face.—Face sickly, hollow-eyed (second day),^{4b}.—Redness of the face,^{7a}.—Paleness of the face (second day),^{4b}.—Frequent alternations in the color of the face (second day),⁶.—Constrictive pain in the face, beginning in the left malar bone (first day),^{4b}.—Extremely exhausting, ulcerative, or sore pain in the right side of the face, corresponding to the malar bone, afterwards also in the left side of the face, beginning in the temple and extending down along the cheek to the lower jaw, and ending in the gum (third day),^{7c}.—Cutting pain in the face, starting from the right upper jaw, and recurring in paroxysms (third day),^{4d}.—Sensation as if something living were under the skin of the face,^{7b}.—**Cheek.** Cutting-drawing pain in the malar bone, beneath the left eye,^{4c}.—[150.] Cutting constrictive pain in the face near the left malar bone,^{4c}.—**Lips.** Quivering of the lips (first

day),⁴.—Itching biting of the lower lip (third day),^{7c}.—*Chin.* Pain in the left articulation of the jaw, as if sprained (second day),^{3a}.—Painful cramp in the left articulation of the jaw, hindering chewing (third day),⁵.—Drawing along the whole right side of the jaws, with heat of the cheeks,^{4c}.—Burning drawing along the left lower jaw,^{4c}.—Tearing pain and sensation of heat in the left lower jaw, caused or aggravated by cold water,³.

Mouth.—Teeth. Painful drawing pains in the teeth of both jaws, with a sensitiveness to cold water (first day),⁷.—Tearing pain in the teeth, more in the alveolar processes of the jaw (third day),^{7c}.—[160.] Burning pain in the right upper back teeth, and afterwards in the corresponding teeth of the left jaw (after three hours),^{4b}.—*Gums.* Drawing pains in the gums (first day),^{4b}.—*General Mouth.* Much mucus in the mouth on waking in the morning (third day),^{4b}.—The whole mouth is coated with mucus, which adheres to the teeth and causes a fuzzy feeling in the mouth, decidedly affecting her speech, in the morning after waking (second day),⁵.—The breath comes hot from the mouth (first day),⁴.—Blisters in the right corner of the mouth,^{7b}.—The roof of the mouth and tongue seemed covered with tallow, a fuzzy feeling, which could not be removed by frequent empty swallowing (first day),^{7a}.—Scraping tickling in the palate and isthmus of the fauces, provoking a dry hacking cough (second day),^{4d}.—Scraping on the palate, in the forenoon (second day),^{4d}.—Sensation of constriction on the inner surface of the cheeks, as from acids or astringents (first day),^{4b}.—*Taste.* [170.] Flat, slimy, sweetish taste in the mouth, in the morning (second day),⁴.—Sour, slimy taste in the mouth, after waking (first day),⁴.—A sweetish flat taste in the mouth (second day),^{4b}.—Bitter taste in the morning (third day),^{4b}.—Slimy, bitter taste in the mouth (third day),^{4d}.—Slimy, pasty taste in the mouth, with a white-coated tongue, in the morning (second day),^{7c}.—Loss of relish for the customary smoke (second day),¹.

Throat.—Rawness of the throat, and a feeling as if the uvula were elongated, with desire to swallow (soon),⁴.—Rawness of the throat, with paroxysms of hoarseness and mucus in the throat (first day),^{4a}.—Scraping in the throat,^{4c}.—[180.] Slight burning in the throat (soon),^{4b}.—Burning at the entrance of the fauces (soon),^{4a}.

Stomach.—Appetite and Thirst. Unusual hunger (second day),⁴.—Unusually good appetite, at noon (third day),^{4a}.—Longing for different things, which, when eaten, cause nausea (first day),^{4a}.—Desire for refreshing things (third day),^{4a}.—He sat down to dinner with hunger and good appetite, but was speedily satisfied; after which, all his food nauseated him; even the least food caused great pressure in the stomach,^{4a}.—He went to dinner with great hunger, yet he did not have his usual appetite, and food seemed to have an acrid taste, as though the palate and fauces were sore; also, he was so completely satisfied by eating a little that he was somewhat nauseated (third day),^{4a}.—Desire to eat, but no appetite; he was averse to food, and was satisfied by a few morsels (second day),⁴.—Appetite greatly diminished (third day),⁴.—[190.] Good appetite, but speedy satiety, with nausea after eating (second day),⁴.—Loss of appetite (second day),^{3 6}; (third day),^{7c}.—Very little desire to smoke, in the evening (first day),^{4d}.—No desire for tobacco; when he attempts to use it, it disgusts him (first day),^{4a}.—Thirst (second day),^{4a}.—*Eructations and Hiccough.* Foul eructations without relief (fourth day),^{7c}.—Foul eructations, tasting of Sulphuretted hydrogen (first day),^{4d}.—Numerous eructations, at times spasmodic, with a loud sound,³.—Eructations tasting like

the juice of Thuja, although he had taken none (first day),^{4a}.—Frequently repeated eructations of air, soon,⁴.—[200.] Frequent eructations of air, followed by hiccough (first day),¹.—Spasmodic hiccough-like eructations (soon),^{4b}.—**Nausea.** Nausea (first day),^{4a}; (second day),^{4b}.—Nausea after eating (second day),¹.—The thought of food causes nausea, in the evening (first day),⁴.—Nausea, with accumulation of water in the mouth (second day),^{4a}.—Nausea and slight inclination to vomit (third day),^{4b}.—Nausea, weariness, and prostration in the limbs, all day (second day),^{5a}.—Nausea immediately after eating, though she ate little and with good appetite (first day),⁷.—Nausea, with dizziness of the head, as if it would sink down,^{4c}.—[210.] Some nausea,^{4c}.—**Stomach.** Swelling of the epigastric region, which was very sensitive to touch (second day),^{4a}.—Feeling of swelling and soreness extending from the stomach to the throat; on swallowing, the food seemed to remain sticking in the throat; on coughing, the parts were sensitive; afterwards, the pain extended transversely from the stomach to the back; the sensation of soreness was especially noticed on coughing and sneezing (first day),⁷.—Painful distension of the epigastric region (third day),^{4b}.—Spasmodic gnawing pain in the stomach, like hunger, with much yawning, before breakfast; after eating there was relief, but the pain returned and lasted the whole forenoon (second day),^{4b}.—The stomach feels overloaded after a light dinner, with nausea, increasing to efforts to vomit, lasting several days,³.—Distress in the stomach, as if overloaded,⁴.—Great faintness at the stomach (first day),^{4a}.—A very faintlike pain in the stomach (second day),^{4d}.—Violent pain in the stomach, in the morning, fasting,^{4c}.—[220.] Pain in the stomach, with slight nausea, which compelled her to eat, after which she felt better (first day),⁵.—Pain in the stomach, with accumulation of much saliva in the mouth,^{4c}.—Violent cramp in the stomach after eating salad (second day),^{4a}.—Cramp in the stomach, in the morning on waking (third day),^{4a}.—Cramplike pain in the stomach a few hours after dinner (second day),^{4b}.—Pressure in the pit of the stomach (first day),^{4a}.—Severe pressure in the stomach (fourth day),^{7c}.—A sudden, only gradually disappearing, stitch in the pit of the stomach,^{4c}.—A sticking-pinching pain in the stomach and right hypochondrium, only when walking (after one hour),^{4a}.—Violent burning in the stomach (first day),^{4a}.

Abdomen.—Umbilicus and Sides. [230.] Tearing about the umbilicus, as after eating green fruit, or as after taking cold (second day),^{4a}.—Cutting pain about the umbilicus, at 7 P.M. (second day),¹.—Pressive pain about the navel on stooping (first day),⁷.—Burning and gripping about the navel, extending into the small of the back (first day),⁷.—Burning about the navel, which extended into the small of the back and changed to a sticking pain,^{7a}.—Burning about the navel while urinating,^{7b}.—Pressure outward in the flanks (third day),^{4d}.—Cutting pain extending from the flanks into the abdomen (fourth day),^{7c}.—Stitches in the right flank, aggravated by deep breathing; this pain afterwards extended to the pit of the stomach (first day),⁷.—Very acute sticking pain in the left flank, aggravated by deep breathing, not affected by coughing (first day),⁷.—[240.] Sticking in the left flank, extending towards the middle of the abdomen (third day),^{7c}.—Dull short stitches in both flanks (first day),^{4d}.—**General Abdomen.** Tympanitic distension of the abdomen (fourth day),^{7c}.—Tense distension of the abdomen after dinner (third day),^{4d}.—*Circumscribed distension of the abdomen* (first day),^{7c}.—Distension of the abdomen, with painful pressing down towards the anus, as from flatulence (after one hour),^{4d}.—Fulness and distension of the upper abdomen, in the afternoon,

with tightness of the breath on ascending steps (first day),⁴.—Much movement of flatus in the abdomen (second day),^{4b}.—Profuse emission of flatus (first night),⁴.—Frequent emission of flatus with general relief (first day),⁴.—[250.] Frequent emission of most offensive flatus, preceded by rumbling in the abdomen, with faintness and sensitiveness; during the emission of flatus there escapes a little watery fæces (frequently repeated), (first day),⁴.—Excessive accumulation of intestinal gas (first day),^{4d}.—Great accumulation of flatus in the bowels (second day),^{4d}.—Very frequent emission of extremely offensive flatus (fourth day),^{7c}.—Emission of flatus, accompanied by moisture in the anus (second day),⁴.—Emission of a large amount of exceedingly offensive flatus, with escape of thin fæces (second day),^{4d}.—Accumulation of gas in the bowels and much noise in the abdomen (second day),^{4b}.—Constant movements in the abdomen, as in diarrhœa, with emission of much offensive flatus, and at times a somewhat pasty stool (second day),^{4b}.—Much rumbling in the bowels, with profuse emission of flatus,³.—Constant rumbling gurgling in the abdomen, at times accompanied with slight griping (second day),^{4d}.—[260.] Fulness and heaviness in the abdomen, causing an inclination to take a deep breath (first day),⁴.—Colic, as from a purge, or as after taking cold, followed by pressure upon the rectum, as though he should go to stool (second day),⁴.—Spasmodic laborlike drawing pains from the abdomen into the small of the back, as if the menses would come on (first day),⁷.—Painfulness of the abdomen to touch, especially about the navel (first day),⁷.—Drawing pain in the abdomen (third day),^{4b}.—Sensitiveness and a bruised pain in the upper abdomen (second day),^{4d}.—Pain in the abdomen, as from incarcerated flatus, with frequent emission of flatus, followed by great relief (first day),^{7c}.—Dragging and pressure as if the menses would come on (sixth day after menstruation), (first day),⁷.—Pressing pain in the groins (first day),⁷.

Rectum and Anus.—Pressure upon the rectum, which seems to force out the anus (third day),^{4d}.—[270.] Frequent urging pressure in the rectum, obliging her to go to stool, followed by emission of only flatus, and constant tenesmus, so that she did not rise from stool for a long time (third day),⁵.—Dragging, as from a weight, in the rectum (second day),^{4b}.—Stitches in the rectum, extending in a long line down towards the anus (second day),^{4d}.—Sudden and urgent desire for stool while urinating, so that he could scarcely reach the closet, though previously he had had no inclination thereto, in the evening (second day),⁴.—Urgent desire for stool, and evacuation of a large quantity of very offensive mushy fæces, preceded by rumbling and emission of flatus (second day),^{4b}.—Urgent desire for stool, with diarrhœa-like evacuation, followed by movement in the abdomen as after a purge; during the course of the forenoon, there were two pasty stools with urgent desire; frequent rumbling and gurgling in the intestines (second day),⁵.—Repeated ineffectual desire for stool (soon, third day),^{7c}.—Renewed desire for stool soon after an evacuation, which was accomplished only gradually and not without difficulty (third day),^{4d}.—Fruitless efforts at stool (first day),⁴.—Frequent desire for stool, with repeated but scanty and pasty evacuation,³.—[280.] Absence of the usual desire for the morning stool (second day),¹.

Stool.—Diarrhœa. Diarrhœa, preceded by much movement of flatus in the abdomen (third day),⁵.—Stool unusually early in the morning, it was softer than usual; this was followed after an hour by a second papaceous stool, preceded by pressure in the rectum, and followed by slight tenesmus (second day),⁴.—Stool mushy, unsatisfactory, after breakfast, fol-

lowed after half an hour by renewed inclination, which disappeared after a difficult evacuation of flatus and eructations (third day),⁴.—A second pasty and scanty evacuation two hours after the first (third day),⁴.—Pasty stool, preceded by diarrhoea-like pain in the abdomen (third day),⁶.—Stool unusually early, scanty, consisting almost only of very offensive water, accompanied by pressure (second day),⁴.—Scanty pasty evacuation of the bowels, which though there had been a stool the evening previous, was seated low down in the rectum (second day),⁴.—Stool delayed, the first part hard, the latter soft and thin (second day),⁴.

Urinary Organs.—Bladder and Urethra. Constant, almost painful pressure upon the bladder and urethra, obliging constant micturition; the evacuation of only a little dark orange-yellow urine; the evacuation of which caused a pain, at times when urinating and when not there was a sensation as if a sharp body were sticking in the urethra,⁴.—[290.] Dragging and forcing in the urethra,⁶.—Broad stitches in the middle of the urethra, at intervals,⁶.—Sudden piercing stitches through the urethra, especially towards the root of the penis (second day),⁴.—**Micturition and Urine.** Frequent and profuse micturition (first day),⁷.—Micturition very early in the morning, with delayed evacuation and swollen feeling of the urethra; this was followed by three evacuations of considerable urine, at short intervals, the evacuation was gradual, and only after waiting a long time (third day),⁴.—Micturition more infrequent than in health; the urine passed in small quantity, and micturition was followed by a swollen sensation in the urethra; the pressure to urinate remained for a short time after a complete evacuation (third day),⁴.—Wetting the bed (second day),⁶.—Frequent copious evacuation of pale, odorless urine, in the forenoon (second day),⁴.—Enuresis twice towards morning, while in a stupid slumber (first night),⁶.—The urine seemed more copious, and was evacuated more frequently than usual during the forepart of the proving,³.—[300.] Evacuation of urine delayed, with a feeling as if the whole course of the urethra were swollen (second day),⁴.—Frequent emission of clear urine, in a larger amount than usual (third day),⁴.—Pale and watery urine was frequently and copiously passed, during forenoon,⁴.—Discharge of scanty dark brownish-red urine, of a penetrating odor, associated with soreness of the urethra (fourth day),⁴.—Much slimy sediment in the urine (second day),⁵.—While urinating the child cried, since the urine made the external genitals sore on account of the eruption (second day),⁶.

Sexual Organs.—Frequent discharge of mucus from the vagina, during the whole proving, and for some days afterwards,⁷.—Redness, sore pain, and burning of the external genitals (fourth day),⁵.—A lump in the labia majora, with burning pain when urinating (fourth day),⁵.—Profuse leucorrhœa of pale mucus (third day),⁵.—[310.] Much slimy leucorrhœa, while walking (third day),⁵.—Frequent pressure and dragging in the uterus, from the groin downward, it seems as if everything would press out, with pressure in the anus and uterus, as in labor (third day); the next day this pressure and dragging in the genitals had disappeared, but there remained great sensitiveness and an ulcerative or sore pain extending into the abdomen, a condition similar to that existing after labor; the leucorrhœa had entirely ceased; the pressure and tenesmus in the rectum continued,⁵.—Menses delayed eight days, lasted but one day and very pale,⁷.

Respiratory Organs.—Tickling, scraping irritation, provoking slight cough, especially in the left side of the larynx (second day),⁴.—Fine sticking in the larynx, aggravated by talking (while walking in the

street),¹.—Hoarseness,^{4c}.—Voice rough and hoarse (soon),^{4c}.—Slight hacking cough,^{4c}.—Tightness of breath (third day),^{4d}.—Sighing (second day),^{4d}.—[320.] Frequent sighing (first day),^{4c}.

Chest.—Oppression of the chest, with pressure upon it (second day),^{4b}.—Feeling of weakness in the whole of the chest, as after a fatiguing march, with acute pressure and pinching under the sternum,^{1a}.—Thrursts, as from a dull stitch, extending from the thorax to the back (second day),^{4b}.—Bruised pain and swelling at the union of the left clavicle with the sternum (third day),^{4d}.—Tearing from the left pectoralis major to the axilla and along the upper arm, with heaviness and sensation of paralysis of the arm, while in bed (third night),^{4d}.

Heart and Pulse.—Tensive sore pain in the præcordial region (third day),^{4b}.—Pulse accelerated, almost jumping (second day),^{4c}.—Pulse rapid, hard,^{2a}.—Pulse small, rather hard, accelerated (third day),^{4d}.—[330.] Pulse full, tense, somewhat accelerated (second day),¹.

Neck and Back.—Tearing from the nape of the neck down to the top of the right shoulder (soon),^{4c}.—Stitches in the back (soon),^{4b}.—Sticking drawing and sensation of increased warmth in the right side of the back, between the regions of the liver and kidneys (first day),^{4d}.—Dull sticking and drawing between the shoulders (third day),^{4d}.—Dull and firmly-seated sticking in the right side, between the flank and lumbar region, near the spine (first day),^{4d}.—Sensation of heaviness in the sacral and dorsal regions (third day),^{4d}.

Extremities.—Trembling of the limbs (third day),^{4b}; (first day),⁷.—General lassitude and weariness of the limbs, with increased warmth of the body, in the afternoon,^{4c}.—Weakness and prostration of the limbs (first day),⁷.—[340.] Weariness of the limbs (third day),¹; (first day),^{4c}.—Great weariness of the limbs, at 10 P.M. (second day),¹.—Prostration and weakness of the limbs, she could scarcely raise the hands on account of weakness (first day),⁷.—The limbs feel painfully bruised (third day),^{4b}.

Superior Extremities.—Weariness in the left upper extremity, even when it is hanging down,^{4c}.—Paralytic heaviness of the arms, especially of the upper arms, preventing work,³.—Drawing, heaviness, and rigidity of the arms, especially in the left arm (second day),^{4b}.—Weariness of the left arm, as if it would fall asleep (first day),^{4b}.—**Shoulder.** Heaviness and painful lameness in the left shoulder, in the afternoon, extending along down the upper arm from the top of the shoulder, in repeated paroxysms, in the afternoon (fourth day),^{4d}.—**Elbow.** Tearing pain from the elbows down the forearms (first day),⁷.—**Forearm.** [350.] Tearing in the forearm near the wrist,^{4c}.—**Wrist.** Tearing on the inner side of the right wrist, and in the left half of the skull (third day),^{4d}.—At the close of the feverish symptoms, there appeared paralytic tearing pains on the inner side of the left wrist (third day),^{4d}.—**Fingers.** Tearing in the right index and middle fingers,^{4c}.—Tearing in the right ring finger, afterwards changing to rigidity (second day),^{4c}.—Sticking in the metacarpal joint of the left thumb (first day),^{4d}.

Inferior Extremities.—Weariness of the lower limbs, in the morning, as if he had not slept enough (second day),³.—Weakness of the lower extremities, and a sensation of prickling in them, as if they would fall asleep (first day),^{4c}.—Painful cramps, here and there, in the flexor muscles of the lower limbs (second day),^{4b}.—**Hip and Thigh.** Drawing pain in a small circumscribed spot in the left hip, while sitting (first day),^{4c}.—[360.] Burning drawing in the right hip (first day),^{4c}.—Throb-

bing and pain in the right hip (first day),⁷.—Tension in the anterior muscles of both thighs, as if too short (while walking), (first day),^{4d}.—Tearing pains in long, but interrupted lines, along the anterior muscles of the right thigh, in the evening (third day),^{4d}.—**Knee.** Weariness and prostration in the knees, after dinner (first day),⁷.—A painful spot as large as the hand, with drawing tension on the left side of the forepart of the knee-joint, extending down on to the leg, with a sensation, on walking, as if the limb were too short, or were tightly bound with a broad band (first day),⁴.—Drawing and tearing about the knee and along the leg (second day),⁴.—Pain on the inner side of the knee, at the insertion of the sartorius and gracilis muscles, as if beaten or stretched, while walking (first day),^{4b}.—**Leg.** Weariness of the legs (second and third days),⁴.—Weariness and drawing jerking in the legs (second day),⁴.—[370.] Weariness and heaviness of the legs (third day),^{4d}.—Weariness of the legs, with outbreak of general perspiration, while walking (second day),⁴.—Rheumatic drawing pain on the inner side of the knee-joint, anteriorly on the patella, while sitting (first day),⁴.—Drawing-tearing pain in the right tibia, at night (first day),⁴.—Tearing on the anterior portion of the leg along the tibia, in the evening (third day),^{4d}.—Paralytic tearing in the right ankle and in the legs.³.—**Foot.** Cramp in the sole of the left foot (first day),^{4b}.—Pain, as from a sprain, in the bones in the back of the foot, extending along the outer margin of the foot (second day),^{4b}.—The inner malleolus of the left foot was painful, as if sprained; on stepping firmly, this pain extended like a tearing and sticking pain to the leg, and was aggravated by motion (second day),^{4b}.—Frequent drawing and tearing pain on the outer side of the left foot, alternating with a feeling as if the foot were swollen (second day),^{4a}.—[380.] A peculiar pain in the left foot, which cannot be better described than as a cramp (third day),^{7c}.—Sticking, throbbing, ulcerative pain in the ball of the left foot, alternating with drawing pain, extending along the whole left side of the foot to the ankle, associated with distension of the veins over the affected parts (third day),^{4a}.—**Toes.** Pain, as from a chill, in the ball of the left great toe, with an ulcerative pain when touched,^{7a}.—Drawing and sticking pain in the ball of the left great toe (second day),^{4a}.

Generalities.—Tremulousness (first day),^{4b}.—Weakness (fourth day),^{7c}.—Weakness, with easy perspiration, from walking (third day),⁴.—Great weakness, after walking (first day),^{4b}.—Loss of power, with trembling and giving way of the knees (first day),⁷.—Great weariness, while walking, in the evening (first day),⁴.—[390.] Lassitude and tremulous weakness.³.—General lassitude and weariness of the limbs (second day),⁴.—Disinclination to work,^{2a}.—Unrefreshed feeling and weariness after rising, in the morning (second day),^{4d}.—Great prostration (third day),^{4d}.—Exhaustion (first day),⁴.—Great exhaustion (third day),^{4b}.—Great malaise (first day),^{4d}.—Prostration (first day),^{4d}.—General prostration,^{2a}.—[400.] Faintness (first day),^{4a}.—General sick feeling (first and second days),^{4a}.—General sick feeling and tremulousness (first day),⁷.—Seems very sick, will not take anything from the hand, not even cold water (third day),⁶.—Heaviness of the whole body, with a feeling as if she would be obliged to sink down (second day),^{4b}.—The whole body seemed bruised, in the morning, on waking (second day),⁴.—The whole body feels weary and bruised, in the morning (second day),³.—Tearing pains, here and there (second day),⁷.—A pulsation extending from the right index finger along the whole arm and neck, to the right side of the lower jaw (second day),⁷.—In the morning

the usual cold bath caused only a transient vigor (second day),¹.—[410.] Symptoms generally removed by moving about in the open air (third day),^{4a}.

Skin.—Redness of the skin (second day),⁶.—Hard pimples on the face, some of which were red (second day),^{4a}.—Pimples on the cheeks (third day),^{4b}.—Eruption of small, red, rather deeply-seated pimples, with violent itching, and burning like fire, after scratching; the child had scratched herself bloody during the night; the eruption appeared first on the neck and arms, afterwards on the back, and gradually spread over the nates and external genitals and thick parts of the thighs, where it was especially abundant; the eruption disappeared when she was cool and uncovered (second day),⁶.—Eruption of clusters of small whitish red pimples on the arms and hands, afterwards also on the chin, nates, fleshy parts of the thighs, and about the knees, with much itching and biting, so that she scratched it bloody, followed by violent sore pain in the parts that had been scratched; at night, violent itching and burning in the eruption in the warmth of the bed, with glowing heat over the whole body, frequently interrupting sleep (second day); on the next day the parts which had been scratched were covered with fine red scurf; the eruption was seen only here and there, was dry and scaly for several days,⁶.—Eruption of small white pimples on the arm (second day),^{4a}.—Itching and burning in the skin (third day),⁶.—Burning itching at night, first in the joints, and then over the whole body, followed by the eruption of small pimples on a dry, moderately hot skin (first day),^{4b}.—Sticking itching, here and there, in the skin, soon,^{4a}.—[420.] Sticking itching, here and there, in the body, especially on the face and upper lip, which seemed swollen (first day),^{4a}.—Itching, here and there, and breaking out of white pimples (first day),¹.—Itching, here and there, on the skin, followed by outbreak of violently itching red papules as large as the head of a pin, in groups, on the inside of the right thigh, and in the inguinal region (second day),^{4b}.—Itching over the whole body, obliging to scratch, in the afternoon (second day),⁵.—Itching in the skin of the whole body, especially on the chest, arms, and fleshy parts of the thighs, disturbing sleep at night; the places were scratched sore and bloody, so that she could no longer remain in bed on account of the burning pain (first day); on the next day the itching was more tolerable, but increased towards evening, and became intolerable in the warmth of the bed,^{7b}.—Itching and redness behind the ears (first day),^{4a}.—Itching on the face, mostly just beneath the skin (first day),^{4a}.—Itching and burning in the face beneath the eye, in the evening; the skin feels very rough (fourth day),^{4a}.—Itching on the chin (second day),^{4a}.—Itching, extending from the left hand up the forearm,^{7c}.—[430.] Itching between the fingers (second day),^{4a}.—Itching on the thick parts of the thighs, which were scratched sore, after which the parts were covered with brown scurf,^{7a}.

Sleep.—**Sleepiness.** Yawning (soon),^{4b}.—Frequent deep yawning,^{7c}.—Frequently repeated yawning, with shivering in the skin and spitting of much saliva (second day),^{4b}.—Long paroxysms of yawning, almost spasmodic (after one hour),^{4a}.—Persistent inclination to yawn (after one hour),^{4a}.—Much inclination to sleep during the day, even during his business, with general lassitude and weariness of the limbs (second day),⁴.—The child was unusually quiet and inattentive the whole forenoon, with great inclination to sleep, and frequently sat as quietly as though asleep; indeed, at noon it was found that she had fallen asleep while sitting in a chair and playing, and was put to bed; she slept past dinner and woke about 3 P.M.;

it was difficult to rouse her, she spoke confusedly, wanted coffee, thinking it was only morning, asked for different things and could not realize that it was already evening; she could not be contented, and her face expressed anxiety and confusion of mind (first day),⁶.—Sleepy after dinner (second day),³.—[440.] Sleepy and exhausted, the eyelids closed (soon),^{4a}.—Long sleep followed by stupor, after dinner (first day),^{4a}.—Long stupefying sleep after dinner (first day),^{4a}.—**Sleeplessness.** Complete sleeplessness, at night,^{2a}.—The whole night sleepless, with complaints of itching, here and there, on the body (first night),⁶.—Sleep at night disturbed by sudden waking, without perceptible cause (second day),^{4a}.—Unrefreshed in the morning,³.—Feeling as though he had not slept enough, on waking in the morning (second day),¹.—Diminished sleepiness; he fell asleep only after a long time, then awoke after an hour and a half from a confused dream, bathed in perspiration; after which he woke several times during the night, with a full, hot, heavy head; the bed seemed too hard; he could find no comfortable place; in the morning he awoke unrefreshed, and the whole body seemed bruised,⁴.—Frequent waking at night (third night),^{4a}.—[450.] Frequent waking at night, with itching over the whole body, with hot, dry hands,^{4c}.—Irritable persistent sleep for a few hours, at 1 P.M., during which she tossed about uneasily, the face distorted as in pain, frequent itching and scratching (second day),⁶.—Night's sleep restless, frequently interrupted by frightful dreams (third day),^{4b}.—Though she fell asleep late she woke without cause, and remained awake for an hour and a half, and then fell asleep again for a short time; only in the morning she had quiet sleep for three hours, from which she woke refreshed,^{2a}.—Sleep at night very restless, a kind of stupefaction (second day),⁶.—Night very restless; he lay in a heavy sleep, full of anxious, confused dreams, with dry heat over the whole body, painful dullness of the head, tormented by noises of flatulence in the abdomen (first night),^{4c}.—**Dreams.** Sleep full of dreams, and unrefreshing,³.—Very vivid dreams, with excessive fear of personal danger; he woke from these dreams at 1 o'clock in slight perspiration, especially on the legs and along the tibia (first night),¹.—Vivid frightful dreams, from which he woke in great excitement; the skin of the legs, and especially over the tibiae, bathed in perspiration (first night),¹.—Many unremembered dreams, at night (second day),².—[460.] Woke suddenly at night from a poetic dream, after which he was wide awake for a long time (first night),^{4a}.—Anxious dream, at night (third night),^{7c}.

Fever.—Chilliness. Chilliness, with a drawing shivering in the skin, while in a warm room (third day),^{7c}.—Chilliness and shivering over the scalp,^{7b}.—Chilliness in the evening (second day),⁶.—Chilly and feverish discomfort towards evening,^{4c}.—Transient attacks of chilliness, with flushes of heat, especially in the face and cheeks (second day),³.—Attacks of chilliness, with flushes of heat, especially of the face and cheeks,³.—Icy-cold creepings (in a warm room), (second day),¹.—Shivering over the scalp,^{4c}.—[470.] Transient shivering over the skin,^{7b}.—Coldness of the feet, in the evening, with burning in the right little toe and its ball (third day),^{4d}.—**Heat.** Glowing heat over the whole body, especially in the feet (first day),^{4a}.—Flushes of heat and orgasm of blood, with a feeling as if he had lost his senses, followed by yawning and relief (first day),^{4a}.—Orgasm and boiling of blood, so that the warmth of the room seemed intolerable,³.—Orgasm of blood; rising of heat from the chest to the face and head, with heat and redness of the face, especially of the cheeks (second day),^{4b}.—

General heat, especially of the palms of the hands, at 5 P.M. (first day),⁴.—Orgasm in the whole body (first day),⁴.—Flushes of heat, with heat of the face (first day),⁴.—Heat of the whole body, except the face, which is cold and sweaty (second day),⁶.—[480.] General increased warmth of the body, especially of the palms of the hands,⁴.—Increased warmth, after dinner (second day),⁴.—Generally increased warmth of the body, which mounts into the face, associated with heat of the palms of the hands (third day),⁴.—Increased warmth of the whole body, especially of the face and cheeks, with a feeling of catarrh and dryness of the nose (second day),².—Dry heat, with much itching over the whole body after midnight, ending towards morning, with perspiration (second day),⁴.—Skin burning hot, so that she threw off the clothes and uncovered herself, with cries and howls; during these attempts she talked irrationally and would not answer questions,⁶.—Heat and throbbing in the head (third day),⁴.—Heat in the head and face, with sticking pains in the forehead, in the morning (second day),².—General sensation of heat beneath the right parietal bone, rather posteriorly, in the evening (second day),².—Glowing heat in the forehead, at night (second day),³.—[490.] Forehead hot (third day),⁴.—Heat in and on the right ear, which seemed stopped (first day),⁴.—Great heat of the face, especially of the cheeks (after one hour),⁴.—Heat of the face and cheeks (third day),².—Heat of the face and head, with redness of the cheeks,².—Heat in the face, and dizzy confusion of the head,⁴.—Heat of the cheeks, in the forenoon (second day),¹.—Heat of the cheeks, in the evening (first day),¹.—*Sweat.* Perspiration, in the morning,³; (second day),⁴.—General perspiration, in the morning (second and third days),³.—[500.] Perspiration easily excited, especially while walking (second day),⁴.—Profuse perspiration after a sound sleep, at night (fourth day),⁴.—Copious warm perspiration throughout the whole night, even with slight covering (first night),⁴.—Perspired all over at night, woke in the morning with a satisfactory feeling of health (fourth day),⁴.—General warm perspiration soon after falling asleep (second night),⁴.—General warm perspiration, an hour after lying down, in the evening, lasting till 3 A.M., so copious that she was frequently obliged to dry herself,².—Woke in the morning bathed all over in perspiration (third day),².—Nightsweat (second day),⁴.

Conditions.—**Aggravation.**—(*Morning*), Confusion of head; dullness of head; on waking, tearing pain in forehead, with dizziness; cramp in stomach; body feels weary and bruised.—(*Afternoon*), Lassitude and weariness of limbs, with warmth.—(*Deep breathing*), Stitches in flanks.—(*Coughing*), Soreness in stomach.—(*Draught of air*), Sensitiveness of body.—(*After eating*), Nausea.—(*Movement*), Pain in head.—(*Sneezing*), Soreness in stomach.—(*Stooping*), Pain about navel.—(*Talking*), Sticking in larynx.—(*While urinating*), Burning about navel.—(*Walking*), Pain in stomach and right hypochondrium; pain in knee; pain in inner malleolus of left foot.—(*Cold water*), Pain and heat in left lower jaw.—(*Warm room*), Pressive pain in temples.

Amelioration.—(*Coffee*), Head troubles.—(*Cold application*), Pain in head.—(*Closing eyes*), Pain in head.—(*Moving about in open air*), Most symptoms.

TITANIUM.

Preparation. Trituration of the copper-red crystals, obtained from the slag at the bottom of a blast iron furnace (consisting of Titanium cyanide and Titanium nitride).•

Authority. Sharp, in letter to Brodie, p. 93 (Am. Hom. Rev., vol. 3, 1863, p. 516); triturated the crystals; the proportion was 1 grain to 99 of sugar of milk; took 2 grains daily, for a week.

Head.—Giddiness.

Eye.—Desire to keep the eyelids closed.—Imperfect vision, the peculiarity being that *half an object* only could be seen at once.

Stomach.—Loss of appetite.—Nausea.—Feeling of discomfort in the stomach.

Generalities.—I became greatly disordered, and felt and looked wretchedly ill; a perceptible derangement of the whole system, which could not, without danger, have been carried further.

TONGO.

Dipteryx odorata, Schir. (*Baryosma Tongo*, Gaertn.; *Coumarouna odorata*, Aubl.).

Natural order, Leguminosæ.

Common names, Tongo or Tonka bean.

Preparation, Tincture of the dried beans.

Authority. Nenning in Hartlaub and Trink's *Annalen d. Hom. Klinik*, 4, 125.

Mind.—She feels very cheerful (first day).—Sadness, disquietude, bad temper (first day).—Bad humor, it frets him to work or talk (sixth day).—Peevish, feels good for nothing, for an hour and a half (first day).

Head.—Heaviness in the head, on rising, after stooping (first day).—Heaviness in the whole head, in the morning, on waking and after getting up (sixth day).—Confusion of the head, especially the occiput, with somnolence and a sort of intoxication (immediately).—Stupidity in the head during a hard stool, and even some time afterwards.—Headache all the morning, pressure, tearing, and stitching, especially on going into the room; with tearing up the left side of the face, very morose, and much sensitiveness of the scalp, mostly ceasing on using vinegar, at noon (fifth day).—[10.] Drawing pains in the head, now here, now there, especially in the right frontal eminence (after one hour and a half).—Feeling of weight in the head, and sensation as if it was too large (at the end of half an hour).—Throbbing headache, with heaviness of the whole head, in the morning, after rising (seventh day).—The troubles in the head and teeth cease after using vinegar.—Heaviness in the forepart of the head, almost preventing him from lifting his eyes (after half an hour).—Tension at a small place on the vertex (first day).—Several severe dull dartings deep in the vertex (first day).—Transient, painful drawing deep in the brain, in the left half of the forehead, when lying in bed (second day).—Weight in the forehead, on rising after stooping.—Pressure, in the forehead, now here, now there, but more on the left side (seventh day).—[20.] Pressure and throbbing in the vertex (ninth day).—Fine tearing on the vertex, on the right side of the head (after eight hours).—Several pointed stitches in the vertex, and,

at the same time, a painful cutting, like a contraction, in the occiput (second day).—The crown of the head, externally, is very painful to touch (first day).—A shock in the vertex, followed by tearing more in the front in the left parietal bone, and at the same time a painful shooting in the cranial cavity, which makes him cry out (first day).—Tearing in the right side of the head, when stooping, ceasing on rising (fourth day).—A violent tearing, deep in the head, in a small spot in the right parietal bone (after two hours).—When laughing, deep sticking in the right side of the head (second day).—Sharp darting in the right side of the head, followed by tearing in the right ear, in the evening (sixth day).—Several sharp dartings in the upper part of the right parietal bone, through the head, and coming out below the occiput (second day).—[30.] Some sudden severe shootings in the right side of the head, so that she utters loud cries (second day).—Dull stitch in the left parietal bone.—Sharp stitching in the left side of the head (fourth day).—Throbbing stitching above and behind in the right parietal bone, extending toward the forehead, broken off, often, by leaning the head on the hand (second day).—When entering the room, throbbing in both sides of the head, which feels squeezed as in a vice; at the same time sensitiveness of the hairy scalp; this all soon disappeared after dinner (first day).—Throbbing pain in the left side of the head (second day).—Throbbing headache in the left side, as she goes into the room (sixth day).—Compressive headache in the occiput, with external sensitiveness, in the morning, after getting up (sixth day).—Tearing from the right occiput, through the head, to a frequently painful tooth in the right lower jaw.—Dull stitching, followed by tension, in the right side of the occiput; it drew the head backward (seventh day).—[40.] A sharp stitch in the left side of the occiput, and afterwards itching in the same place, ceasing when scratched.—Ulcerative pain in the right side of the occiput, the skin is even painful to the touch.—Extreme sensitiveness and painfulness of the scalp to touch (sixth day). •

Eyes.—Dryness and burning in the eyes, in the evening, when reading (second day).—Burning in the eyes, as if they were too dry, in the afternoon (third day).—Violent tearing in the right upper orbital border (first day).—Three painful tearings, externally, above right orbital border (first day).—Violent biting and sticking in the right eyebrow, in the afternoon (seventh day).—So violent a trembling in the right upper lids that the eye waters with it; frequently renewed, for two hours (seventh day).—Feeling as of a grain of sand in the inner canthus of the eye (first day).—[50.] Tension around the lower eyelid; she dares not open it for fear of an aggravation, which, however, did not occur (first day).—Tearing and tension in the left lower eyelid (second day).—A burning shooting in the lower eyelid, like a bee-sting (seventh day).—Itching in the inner canthus of the left eye, in the afternoon (seventh day).—Itching in the inner canthus of the left eye, which rubbing relieves, but does not remove (after one hour and a half).

Ears.—Twisting dartings in the lobe of the right ear, so that she starts (first day).—Some painful tearings around the right ear.—Violent tearing behind the right ear in the bone (fifth day).—Tearing in the external auditory meatus, which goes on penetrating more deeply, until it reaches the internal meatus, where it terminates; it returns after a short interval (first day).—Painful tearings deep in the left ear (first day).—[60.] Tearing, followed by titillation, in the left ear (seventh day).—A couple of sharp dartings in the right inner ear, so that she starts (first day).—Pain-

ful crawling in the right ear, which ceases on introducing the finger (second day).—Violent itching in the right ear, the act of scratching increases it (fifth day).

Nose.—Violent sneezing, ten times in the night (tenth day).—Coryza, with stoppage of the nose, she is obliged to hold the mouth constantly open, at night; this ceases in the morning, but returns at noon.—Slight tearing in the root of the nose, with irritation to sneeze, in the evening (first day).

Face.—Face very pale, in striking contrast with red cheeks (eighth day).—Feeling as if the mucous membrane of the left cheek was drawn up (first day).—Tension in the right malar bone, with feeling as if there was a slight weight there; pressure removes this, and it returns, but in a less degree (after one hour and a half).—[70.] Painful tearing in the left upper jaw, but she cannot tell whether it is in the gum or in the roots of the teeth (second day).—Slight tearing in the right lower jaw, and at the same time tickling itching in the ends of the teeth, and tearing in the roots of the same; the pain ceases in the jaw, but not in the teeth on biting on them (after two hours).

Mouth.—Bleeding of a hollow tooth of the left lower jaw, the blood has an acid taste, in the evening (seventh day).—Some painful tearings in a hollow tooth of the left lower jaw, an hour after dinner (first day).—Violent tearing in all the left lower teeth, from behind forward, as if they were being pulled out, after dinner (first day).—Digging and disturbance in the left lower posterior molar, unchanged by cold and heat; they are aggravated by the contact of food (sixth day).—Several painful tearings in three left inferior molars; she believes they are being pulled out, after dinner (first day).—A violent tearing in the left lower jaw, in a corresponding molar tooth (first day).—Tearing in the left upper molars, when laughing. Tearing from the last left molar to the upper part of the head, in the morning, after rising (seventh day).—[80.] Tearing in some of the left lower molars, which cold water causes to cease, in the afternoon (first day).—Tearing in the roots of the upper molars; the pain reaches as far as the zygomatic process, and is followed by crawling in their tips; on closing the jaw it at first increases, then ceases (second day).—At dinner, violent tearing in two lower molars of the left side, aggravated by biting on them, in the forenoon (first day).—Shooting, which, starting from a diseased tooth, goes through the head and the muscles of the right side of the nape of the neck (first day).—Tickling in some molars of the right side, in biting on them, ceasing when she opens the mouth (first day).—Acrid blood flows from the left lower gum, without sucking, in the evening (third day).—Tearing in the left lower gums and in the teeth (seventh day).—Burning of the palate (after three-quarters of an hour).—Fine tearing in the back part of the palate (in half an hour).—Flow of water in the mouth.—[90.] Mouth constantly full of water, almost all the forenoon.—Acid taste in the morning, after getting up (second day).

Throat.—Abundant viscid mucus in the throat, which disappears by frequent hawking (first day).—Rawsness in the throat, disappearing after supper (in three-quarters of an hour).—Scraping and rawness in the throat, in the morning (first and second days).—In the right side of the pharynx, feeling as if a rough, sharp substance slowly forced itself into the ear, and moved about for some time deeply in the interior (after one hour and a half).

Stomach.—Frequent thirst at all hours of the day (second and third days).—Several returns of empty rising from the stomach.—Risings, as

after eating bitter almonds (after five minutes, and often).—Strong hic-cough, immediately after dinner (first day).—[100.] Nausea and inclination to vomit (after three-quarters of an hour).—In the forenoon, loathing and desire to vomit, ceasing after dinner (first day).—Pleasant heat in the stomach (after half an hour).—Slight whirling, with pinching, first in the epigastrium, then in the hypogastrium, ceasing on the emission of flatulence, in the afternoon (second day).—Circumscribed cutting around the stomach, on both sides, more to the right, for an hour, in the forenoon, when walking (first day).—A couple of dull shootings in the right side of the stomach, together with a dull shooting above the left knee, before noon (seventh day).—A pricking, a sort of shooting, in the left side of the stomach, as if an intestine was tightened and immediately relaxed, painfully repeated several times (first day).

Abdomen.—Inflation, at first in the bowels, then also in the stomach, in the forenoon (second day).—Frequent loud emission of flatulence, at night (first day).—Burning tension in the right lower region of the abdomen, and extending in the chest to the right shoulderblade, deeply seated, in the afternoon (first day).—[110.] Sensation almost like pinching, at first to the right, a hand's breadth below the pit of the stomach, then in the right side of the abdomen, afterwards in the left upper side of the abdomen, after dinner (first day).—Slight pinching in the right side of the upper abdomen, extending late to below the umbilicus (second day).—Pinching in the upper abdomen, with sensation in the stomach as if a ball was rolling about there, during the menses.—Disagreeable pinching in the bowels, then urging to stool, and an evacuation, which is larger than usual:—Pinching and borborygmi in the bowels, then diarrhœic stool, with mucus, followed by tenesmus (eighth day).—Pinching and rolling in the bowels, as if a diarrhœa was coming on, but he passes only two small hard lumps, and with a good deal of pain, after which the scraping in the anus lasts a long time (sixth day).—Great soreness of the bowels after a diarrhœic stool (eighth day).—Very painful feeling in the hypogastrium, in front, beneath the umbilicus, in the right side, to the extent of more than six inches, as if a thread were there, and caused smarting and gnawing over one small spot.—Burning in the right groin, which comes on and goes off while walking (first day).—In the right groin a deep sharp shooting, then over large surface a burning outside, with sensation as if an oblong hole was dug in her inside, in the afternoon (first day).—[120.] Sensation in the right groin as if the skin of the bowels was retracted, or rather a painful pressure externally, after dinner (first day).

Stool and Anus.—While walking, violent urging to stool.—Urging to stool, yet, notwithstanding violent efforts, he passes nothing.—Normal stool, and, half an hour after, very soft stool, with pinching at intervals in the whole abdomen and tenesmus (eighth day).—Hard stool, with pressure (seventh, eighth, and ninth days).—Stool so solid that she is very tired during defecation, and fears something is ruptured (sixth day).

Urinary Organs.—Increased urination; urging early in the morning in bed (third day).—The urine is more sedimentary, normal as to quantity, tardy in emission, with a thick cloud (fifth day).—Scanty urine, depositing an abundant white sediment.—Urine of a wine-yellow color, depositing at once a quantity of viscid mucus (fifth day).—[130.] Red urine; it deposits a thick muddy sediment (sixth day).

Sexual Organs.—Flow of thick mucus from the vagina when strain-

ing at stool.—Leucorrhœa, when walking, often in the day.—Very scanty painless menses, seven days too early.

Respiratory Apparatus.—Hoarse voice, with burning in the larynx (first day).—Transient irritation to cough in the larynx, forenoon (first day).

Chest.—Burning below the xiphoid cartilage, and at the same time a fine stinging (after half an hour).—Burning in the region of the false ribs and cutting pain, which extends over the back, as if a sharp body was ploughing the skin (second day).—Rumbling and clucking in the first false ribs of the left side, in front of the pit of the stomach, in the afternoon (second day).—Sudden burning a hand's breadth below the right armpit, externally (first day).—[140.] When leaning towards the right side, while sitting, tensive burning in the region of the left ribs, a hand's breadth below the armpit (first day).—Burning in the region of the left false ribs, as if a tight string had entered the flesh, after dinner (first day).—Sudden and repeated burning, causing him to start, over the left lower ribs, in the evening (first day).—Burning in the region of the right false ribs, as if a string or a garment was very tightly tied around them; pressure diminished it a little, and this place is then slightly sore on pressure (after one hour and a half).—Pain, a sort of cutting and bruised feeling, under the left breast, which passes thence toward the pit of the stomach and back again several times; it is relieved by pressing on the parts, but afterwards returns (first day).—Sharp stitching deep in the chest, in one side, below the armpit, without relation to the respiration (second day).—Some very slight shootings, like stings, over the middle of the two first false ribs on the right side (after three-quarters of an hour).—Some sharp stings in the eighth and ninth right ribs (first day).—Sharp stinging, severe, under the left chest as far as the armpit (second day).—Two sharp stings in the seventh left rib, then over a larger surface; at the same time a sort of burning and darting in the outer chest.—[150.] Burning stinging in front under the left chest when raising oneself after stooping (first day).

Neck and Back.—Wrenching pain in the left side of the nape of the neck, less when turning the head, sensitive to pressure (second day).—Sharp stinging in the left scapula through the shoulders, in the morning (second day).—Pain in the sacrum, which is very sensitive to external pressure (second day).—Violent bruised pain in the sacrum when sitting, ceasing during exercise (third day).

Upper Extremities.—A couple of dull shootings in the left shoulder (first day).—Paralytic pain in the right axilla (after one hour).—Lancinating tearing in the head of the left humerus during rest (fifth day).—Burning in the right elbow, ceasing when rubbed (first day).—Sensation of internal pressure in the left forearm, in the elbow (after one hour).—[160.] Tearing in the elbow, at a point above the wrist-joint and extending to the latter, short-lasting, but very painful (after one hour).—Violent tearing below the condyle of the left elbow, which ceases when pressed upon, but returns (first day).—Stinging and tearing in the right arm, directly below the elbow (eighth day).—Tearing in the posterior joint of the right thumb as far as the middle, which ceases on movement (second day).—Tearing in the middle of the posterior phalanx of the right index finger (first day).—Violent tearing in the extensor tendons of the right middle and ring fingers, during dinner.

Lower Extremities.—After dinner, at 3 o'clock, tearing in the left hip-joint, ceasing on being rubbed, when walking; a couple of violent sharp

twitchings deep in the right hip, when standing (second day).—Twitching, with fine stitches, in the middle of the right thigh on sitting, ceasing on standing up (second day).—Violent tearing in the left thigh, as if in the bone, when standing, ceasing when seated (second day).—Violent tearing in the left thigh and knee, relieved by pressure, in the evening (first day).—[170.] Tearings sometimes in the thigh, sometimes in the knee, relieved by walking and pressure, all day (sixth day).—Tearing at first in the left knee, as far as the middle of the tibia, then in the middle of the thigh, toward the hip-joint, relieved a little by pressure (first day).—Tearing over a hand's breadth above the left knee, extending into the knee-joint (first day).—Shocks in the knee when walking, so severe that she is threatened with falling, during the menses; some painful tearings in the right tibia (first day).—Violent stinging, like the prick of a needle, repeated six or seven times, in the fatty portion of the right great toe, after dinner, when seated (second day).

Generalities.—Great indolence and sleepiness after dinner (seventh day).—Feeling of comfort (immediately).

Sleep and Dreams.—Yawning, stretching, dread of work, without sleepiness.

Fever.—Shaking chill, from 2 o'clock to 5 o'clock P.M., in the open air (first day).—Heat in the head, and even external warmth on the forehead.—[180.] Increased heat in the head, in the morning (first day).—Flushes of heat, not disagreeable, from the umbilicus to the stomach (first day).

Conditions.—**Aggravation.**—(*Morning*), On waking and after getting up, heaviness in head; headache, etc.; after rising, headache, etc.; after getting up, headache in occiput; after getting up, acid taste; scraping, etc., in throat; early, in bed, urging to urinate; stinging in left scapula; heat in head.—(*Forenoon*), Mouth full of water; loathing, etc.; when walking, cutting around stomach; shootings in side of stomach, etc.; inflation in bowels, etc.; irritation to cough.—(*Afternoon*), Burning in eyes; biting, etc., in eyebrow; itching in left canthus; whirling, etc., in epigastrium, etc.; tension in abdomen; shooting in groin, etc.; rumbling, etc., in side; 2 to 5 o'clock, in open air, shaking chills.—(*Evening*), Tearing in side of head, etc.; when reading, dryness, etc., in eyes; tearing in root of nose, etc.; bleeding of teeth; blood from gum; burning over lower ribs; tearing in thigh, etc.—(*Night*), Emission of flatulence.—(*Contact of food*), Pain in left molar tooth.—(*During dinner*), Tearing in tendons of fingers.—(*After dinner*), Tearings in hollow tooth; tearing in lower teeth; hic-cough; sensation below pit of stomach, etc.; sensation in right groin; burning in region of ribs; 5 P.M., tearing in hip-joint; when seated, stinging in great toe.—(*Leaning to right side while sitting*), Burning in region of left ribs.—(*Laughing*), Sticking in side of head.—(*During menses*), Pain in upper abdomen, etc.—(*Rising after stooping*), Heaviness in head; stinging under left chest.—(*Entering room*), Throbbing in sides of head, etc.; throbbing in side of head.—(*Scratching*), Itching in ear.—(*Sitting*), Pain in sacrum; twitching, etc., in thigh.—(*Standing*), Twitching in right hip; tearing in thigh.—(*Stooping*), Tearing in head.—(*After diarrhetic stool*), Soreness of bowels.—(*During and after hard stool*), Stupidity in head.—(*Walking*), Urging to stool; leucorrhœa; shocks in knee.

Amelioration.—(*Biting on teeth*), Pain in jaw ceases.—(*After dinner*), Throbbing in head disappears; loathing, etc., ceases.—(*On emission of flatulence*), Whirling, etc., in epigastrium, etc., ceases.—(*During exercise*),

TOXICOPHLÆA—TOXICOPHIS.

Pain in sacrum ceases.—(*Leaning head on hand*), Stitching in parietal bone broken off.—(*On movement*), Tearing in thumb ceases.—(*Pressure*), Burning in region of right ribs; pain in left breast; *tearing in knee, etc.; tearing in thigh, etc.*—(*On rising after stooping*), Tearing in head ceases.—(*When rubbed*), Burning in elbow; in walking, tearing in hip-joint ceases.—(*When seated*), Tearing in thigh ceases.—(*After supper*), Rawness in throat disappears.—(*Standing up*), Twitching in thigh ceases.—(*Turning head*), Pain in side of nape of neck.—(*After using vinegar*), Troubles in head, etc., cease.—(*Walking*), Tearing in thigh, etc.

TOXICOPHLÆA.

Toxicophlæa thunbergi.

Natural order, Apocynaceæ.

Arrow-poison of the Bushmen.

Preparation, from the bark.

Authority. George Grey, M.D., Brit. Med. Journ., 1874 (2), p. 169, effects of a decoction of the bark.

Convulsions; loss of muscular power; death in a few minutes.

TOXICOPHIS.

Toxicophis pugnax, B. and G.

Animal kingdom.

Class, Reptilia.

Order, Ophidia.

Common name, Moccasin.

Authorities. 1, Wm. Ingalls, Bost. Med. and Surg. Journ., vol. 27, 1842, p. 470, a strong healthy man was bitten on the right ankle; 2, Wm. Stockbridge, Bost. Med. and Surg. Journ., vol. 29, p. 42, Mr. — was bitten on the leg when he was ten years old; 3, same, a second case.

Face.—Countenance somewhat anxious (after one hour),¹.

Inferior Extremities.—Right leg œdematous, considerably larger than the left (after one hour),¹.—A few drops of a limpid fluid came from the wounds (after one hour),¹.—The leg became painful and swelled rapidly, the swelling extending to the hip, attended with high irritative fever (after half an hour),².—For several years the pains were confined to the knee of the limb bitten; in a few years it left the knee and seized the hip, and finally it attacked the shoulder, the last attack being very slight.²

Pulse.—Pulse accelerated, full, regular, easily compressible (after one hour),¹.

Generalities.—For the last eighteen years he has had an annual recurrence of symptoms, attended with severe pain, but not accompanied with swelling; it occurred at precisely the same time of the year, continued several days, but decreasing in severity every succeeding year,².—Every year the symptoms have returned with less intensity and with an absence of swelling,³.—Skin rather dry (after one hour),¹.

TRACHINUS.

Animal kingdom.

Class. Pisces.

Order. Teloster.

Trachinus Draco and Vipera.

Common names. Great and lesser Weever, Sting-bull and Sting-fish.

Authorities. 1, Prof. Allman. *Annals and Mag. of Nat. Hist.*, vol. vi, 1840, p. 161 (Dublin Med. Press, 2d ser., vol. ix, 1864, p. 562), a wound on the thumb, from *Trachinus vipera*; 2, Tarenfeld and Landeberg, *A. H. Z.*, 8, 136 (from the Swedish), effects of the stings of *T. Draco*.

Mind.—Raving,².—Hydrophobia,².—Anxiety,².—Fear of death,².

Head.—Vertigo,².—Violent headache,².

Stomach.—Violent thirst,².—Nausea,².—Green bilious vomiting,².

Respiratory Organs.—[10.] Paroxysm of suffocation,².

Heart and Pulse.—Palpitation,².

Generalities.—Swelling of the whole body,².—Swelling of the wounded arm, then of the head and chest,².—A peculiar stinging pain occurred a few seconds after the wound, and this gradually increased during a period of fifteen minutes; the pain had now become almost intolerable, extending along the back of the thumb towards the wrist; it was of a burning character, resembling the pain produced by the sting of a wasp, but much more intense; the thumb now began to swell, and exhibited an inflammatory blush, extending upwards to the wrist; the pain was now distinctly throbbing and very excruciating; in this state it continued for about an hour, when the pain began somewhat to subside, the swelling and redness still continuing; in about an hour and a half the pain was nearly gone; next morning the swelling of the thumb had but slightly diminished, and was in some degree diffused over the back of the hand, the thumb continued red and hot, and painful on pressure over the metacarpal bone; in a few days the swelling had completely subsided, but the pain on pressure continued for more than a week,².—The edges of the wound became thick, hard, tense, and insensible; black and gangrenous,².—Weakness,².—Violent burning pain, extending from the wound into the chest,².

Skin.—The skin of the whole body becomes yellowish green,².—Gangrenous blisters on the arm,².

Sleep.—[20.] Sleepless,².

Fever.—Constant fever, with irregular pulse,².—Cold clammy sweat,².

TRADESCANTIA.

Tradescantia diuretica, Mart.

• *Natural order.* Commelyneæ (Liliaceæ).

Preparation. Tincture of the leaves.

Authority. Mure, *Pathogenesie Bresil*.

Head.—Vertigo.

Stool.—Diarrhœa.

Urinary Organs.—Whitish discharge from the urethra.—Pain when urinating.—Thin stream of urine.—The urine has an acrid smell (second day).—Yellowish, copious urine, depositing at the bottom of the vessel an ash-colored, copious sediment (second day).

Sexual Organs.—Inflammation of the scrotum, which is painful and very red (second day).—The inflammation of the scrotum decreases since the twelfth day.—[10.] The testicles return by the inguinal ring.

Respiratory Organs.—The breathing is very painful.—The breathing is embarrassed, as when one is affected with catarrh (first day).—Difficult breathing, sighing, as from want of air (second day).

Chest.—Pain in the left side of the chest (first day).

Generalities.—The symptoms continue from the third to the fifteenth day.

TRIFOLIUM REPENS.

Trifolium repens, Linn.

Natural order, Leguminosæ.

Common names, White Clover; (G.) ~~Wiesender-klee~~; (Fr.) Trefle blanc.

Preparation, Trituration (provings), or Tincture of the heads of flowers.

Authority. T. Cation Duncan, M.D., Trans. New York State Hom. Soc., vol. viii, 1870, p. 248, Dr. Douglass took a trituration of the flowers, one part to six of *Sac. lactis*; the effects were so speedy and marked that six other persons took it, with substantially the same results within a few minutes, in a number of cases.

A feeling of fullness or congestion of all the salivary glands; in some instances amounting to decided discomfort, and even pain, quickly followed by increased, sometimes copious flow of saliva. One of the provers placed her hands on the parotid gland and said she felt just as if she had the mumps coming on.

TRIFOLIUM PRATENSE.

Trifolium pratense, Linn.

Natural order, Leguminosæ.

Common names, Red Clover; (G.) ~~Wiesen-klee~~; (Fr.) Trefle.

Preparation, Tincture of the flower-heads.

Authorities. 1, T. Cation Duncan, M.D., Trans. New York State Hom. Soc., vol. viii, 1870, p. 237, took of mother tincture, prepared by macerating the blossoms in pure alcohol for five months, 10 drops at 4 and 8 P.M. (first day); same at 8 A.M. and 8 P.M. (second day); in morning and at noon (third day); at 11 A.M., 2 P.M., and on retiring at night (fourth day); 24 drops in morning, 65 at 10 P.M. (fifth day); 2, John Duncan, health always good, took 5 drops of tincture at 9 P.M. (first day); took the medicine about half an hour before eating (second day); took it regularly (third and fourth days); 10 drops (fifth day); 3, A. C. Thomas, æt. seventeen years, had been in good health for some time, except a little rheumatism in the limbs during damp weather, took 10 drops of 1st dil. at 6 A.M., and repeated the dose every four hours during the day, and so continued till 3 P.M., sixth day.

Mind.—Ideas confused in the morning (sixth day).¹

Head.—I awakened with a great headache, in the morning (sixth day).¹—Great dullness of the anterior lobes of the brain (sixth day).¹—Head and perceptions very dull (seventh day).¹—At 9 A.M. felt a dull headache; in the evening the headache became very severe, as my headaches always do (first day); rose at 5.30 A.M. with severe headache; most

severe at 10 P.M. (second day); rose at 5.45 A.M. with the usual headache, accompanied by griping pains in the abdomen; headache very severe all day (third day); severe on rising (fourth day); rose at 5.15 A.M. feeling dull and heavy, and with a severe headache (fifth day); a slight headache continues (seventh day); the headache continued until the tenth day.³—Brain feels very dull (fourth day); has been very dull all day; could not think nor remember; brain feels as if full; head is hot and feels very large (sixth day).¹—Waked to-day with a headache (third day).²—Head feels full, especially the occiput (fourth day).¹—Head feels full of blood (fifth day).¹—[10.] Intermittent headache, the attacks last but half an hour (third day); the same full feeling in the head (fourth day).¹—Frontal headache (second day).²—For a few moments a prickling sensation in the forehead (sixth day).¹

Eye.—Eyes feel dull and sore (sixth day).¹—Eyes feel heavy (second day).²

Nose.—Some discharge of thin mucus from the nose (fourth day).¹—Much mucus in the nasal cavity (fifth day).¹—Flow from the nasal cavity very much increased (fifth day).¹—Some discharge of mucus from the nose (second day); mucus secreted in great quantities in the nose (third day).²—Nasal mucous membrane feels dry (second day).¹

Mouth.—[20.] Whole mucous tract sensitive (seventh day).¹—The taste of the medicine is very disagreeable, and is always in my mouth (fifth day).²

Throat.—Much mucus in throat at 10 P.M. (second day).³—In the forenoon my throat began to feel dry and hard; at 8 P.M. it feels as if raw; it feels as if something were in it; I continually try to clear it (second day); throat feels much irritated (third day); great soreness of throat (fourth day); throat all the way down feels as if scalded (fifth day).²—(I have a slight sore throat and hoarseness this morning before taking the drug; has disappeared in the evening) (first day); slight difficulty in swallowing (second day).³—Throat feels dry and husky; I keep swallowing continually (second day); throat symptoms more severe (third day).¹—Great dryness of the trachea, causing me to clear the throat of some foreign substance at 11 A.M.; throat still dry at 2 P.M.; about an hour later (an hour after the second dose) throat began to feel worse, causing me to cough and try to clear it as much as possible; this irritation continued all day; I feel, while in a close room, as if I could not get air enough; feel much better while out of doors (fourth day); but little irritation of the throat in a cool room or in the fresh air; but the same as before in a close room, though not so much as last night, in the morning; throat felt dry in the afternoon, then after two hours it became quite moist, and there was great expectoration (fifth day); all the throat symptoms have gone at 4 P.M.; irritation of the trachea in a close room at 8 P.M., disappearing on going into the fresh air (seventh day).¹—Have had continued irritation of the pharynx and trachea, causing a continued short, hacking cough, with an accumulation of mucus, which I must expectorate (third day).¹—A sharp pain through the uvula, causing the tears to start (fifteen minutes after second dose).¹

Stomach.—Not much appetite (fourth day).³—[30.] Great thirst (fourth day).³—Hiccough for half an hour (fourth day).¹

Abdomen.—Rose at 5.45 A.M., with griping pains in the abdomen, with the usual headache (third day); pains in bowels continuous and severe; severe griping in the abdomen (fourth day); colicky pains all day (fifth day); gripings have ceased (seventh day).³

Stool.—Very costive (eighth day); afterwards my bowels were very

costive, and each defecation was followed by several drops of dark blood, attended by a bearing-down sensation, not a griping, nor a true tenesmus, but more as if the bowel would prolapse from its own weight; this lasted about two weeks, after which my bowels became regular.¹—No stool since I began the proving (third day); stool this afternoon for the first time, hard, and covered with mucus (fifth day); bowels moved freely (seventh day).³

Urinary Organs.—Uneasiness in region of kidneys (third and following days).¹—Kidneys very sore (seventh day).¹—An increase in the quantity of urine; sp. gr. 1021, very light-colored (second day); urine copious (third day); very copious (fifth day).²—A large quantity of urine; the bladder felt very full (first day); have urinated oftener than usual to-day, and a large quantity; sp. gr. 1026, color clear (second day); sp. gr. 1019, in the morning; urine more profuse than is natural; sp. gr. 1029, in the evening (after walking a great deal during the day), (third day); more copious, sp. gr. 1030, in the morning; still copious, with uneasiness about the kidneys; sp. gr. 1032, in the evening; sp. gr. 1036, at 10 P.M. (fourth day); great urging to urinate, the bladder feels full to overflowing; sp. gr. 1022, in the morning; 1024, at 12 M.; uneasiness of the whole urinary tract; sp. gr. 1034, at 10 P.M. (fifth day); 1028, in the morning; whole mucous membrane of the urinary tract feels irritated; sp. gr. 1030, small quantity of urates, more phosphates at 9 P.M. (sixth day); urine not so profuse; uneasiness of kidneys still present; vesical tenesmus after urinating (seventh day); urine of a deeper color (eighth day).¹—Urine has, in health, a sp. gr. of 1020 to 1025; at 3 P.M. to-day it was 1030, limpid and copious (first day); sp. gr. of urina sanguinis 1032; sp. gr. of urina chyli 1034 (second day); sp. gr. urina sanguinis 1030; sp. gr. urina chyli 1034 (third day); urina sanguinis 1030, urina chyli 1032, urine much less in quantity (fourth day); urine as day before yesterday, but scanty (sixth day); urine, sp. gr. 1023, much less in quantity (seventh day).³

Respiratory Organs.—[46.] Some irritation in the bronchia, causing a short, hacking cough (second day).¹—Dry, hacking cough occasionally (second day); have coughed all day (third day); ceased medicine, it is so bitter, and provokes such a cough that it annoys me; almost incessant hacking cough (fifth day).²—Felt oppressed in breathing, or rather that I was breathing air loaded with impurities after retiring; pulse slow and irregular; this lasted about half an hour, after which I slept as usual (second day).¹—Some dyspnoea, disappearing on going into the fresh air (seventh day).¹

Chest.—Lungs feel as if full of blood, at 2 P.M.; at 10 P.M. had to leave a close room on account of the oppressed feeling in my chest; on coming into the fresh air I was obliged to cough much; this was followed by hiccough and profuse expectoration (fourth day).¹—The lungs feel as if in the first stages of pneumonia (fifth day).¹—Chest feels tight and oppressed (second day).²—On reclining or lying down my chest feels distressed, as from deficient aeration of blood in the lungs (third day).¹

Pulse.—Pulse 72, slow and irregular for half an hour (second day); 61 (third day); 64 (fourth day); half an hour after the first dose the pulse was very weak, then it began to grow full and rapid; this lasted two hours; after retiring at night, pulse very weak, intermitting one or two beats; once it stopped for a few seconds; this was followed by a bounding pulse (fifth day); 72 (seventh day).¹—Pulse 84, full and strong (second day).²—[50.] Pulse 70 at 8 A.M.; 72 at noon; 75 at 9 P.M. (first day); 72 at 9 A.M.; 70

at noon; 76 at 4 P.M.; 76 at 10 P.M. (second day); 68 at 7 A.M.; 70 at noon; 74 at 9 P.M. (third day); 74 at 7 A.M.; 74 at noon; 80 at 9 P.M. (fourth day); full and strong, 80 at 7 A.M.; sank to 68 at 3 P.M., but rose to 76 in the evening (fifth day); 74 in the evening (sixth day).³

Superior Extremity.—Tingling in the palm of the left hand; also in the left arm (sixth day).¹

Generalities.—Rose at 5.15, feeling dull and heavy, and with a severe headache (fifth day).³—Dull and stupid all day (seventh day).¹—While in a close room, felt very faint, disappearing on going into the fresh air (seventh day).¹—In the evening I feel much better in every respect (sixth day).³

Sleep.—Felt as if I had not been asleep, on awaking in the morning (sixth day).¹—Slept poorly and with little refreshment (sixth night).¹

Fever.—In a few moments after retiring (after the second dose) I began to feel cold; pulse at the wrist very weak, intermitting one or two beats; once it stopped for a few seconds; this was followed by a bounding pulse; I became very warm, and my breathing stopped; my lungs felt as if I were breathing in hot air (fifth day).¹—Feet and hands cold; head hot (seventh day).¹

TRIMETHYLAMINUM.

Trimethylamin, C_3H_9N .

Preparation, solutions.

An alkaloid found in the following plants: *Chenopodium vulvaria*, *Crataegus oxyacantha*, *Sorbus aucuparia*, *Phallus impudicus*, *Pyrus communis*, *Arnica montana*, *Cotyledon umbilicus*, *Fagus sylvatica*, etc.; also in Herring-brine, Cod liver oil, etc.

Authority. M. Dujardin-Beaumetz, *Nouvelles Recherches sur la Triméthylamine*, Paris, 1872; 1. effects on himself, of 50 centigrams of the muriate dissolved in water; 2, another person in perfect health took 75 centigrams of the muriate; 3, results of several experiments.

This drug, according to several experiments on patients, etc., diminishes the amount of urea; in one case there was a diminution of over 2 grams during twenty-four hours, in another 2.24 grams, in another a diminution of 3 grams.³—Pulse 88 (before the experiment); 84 (after one hour); 82 (later); 76 (after two hours). There was not only a diminution in the number of pulsations, but also a modification in the force, as shown by the tracing (it shows no special modification, with the exception of diminution in the force of the heart's action).²—Pulse 78 (before the experiment); 76 (after one hour); 74 (after one hour and a half); 72 (after two hours); 78 (after four hours).¹—Temperature 37.4° (before the experiment); 37.2° (after one hour); 37° (after one hour and a half); 36.8° (after two hours).¹—Temperature 37° (before the experiment); 36.8° (after one hour); 36.4° (later); 36° (after two hours).²

TRIOSTEUM.

Triosteum perfoliatum, Linn.

Natural order, Caprifoliaceæ.

Common names, Fever-wort, Horse-gentian.

Preparation, Tincture of the root.

Authorities. 1, Williamson, Trans. American Institute of Hom., a few drops of tincture in water every day, for three successive days; 2, same, Neidhard; 3, R. Tallmadge, M.D., Hale's New Remedies, 1864, p. 1019, 2d. dil.

Mind.—Greater cheerfulness (first day).²

Head.—Giddiness when rising at midnight, with extreme drowsiness.¹—Headache worse from sitting up.¹—Headache, which is worse in the right side of the forehead of the head, and right temple.¹—Increasing pain in the head.¹—Boring pain in the right temple at 3 A.M.¹—Boring pain in the left temple.¹—Pain in the right side of the head, and in the back.¹—Pain in the hinder part of the head, with the sensation of weight.¹

Eye.—[10.] Slight pain in the left eyeball.¹

Nose.—Sneezing.¹

Throat.—Soreness, as if from swelling of the pharynx, and pain in the oesophagus on swallowing.²

Stomach.—Increased appetite through the day.¹—Loathing of all food.¹—Thirst, but not a very urgent desire for drink.¹—Slight nausea.¹—Nausea on rising, which was immediately followed by copious vomiting of very sour ingesta, attended with cramp in the stomach, and followed by perspiration, and a pain in the forehead, which was worse on the left side.¹—Vomiting at 5 A.M., on rising to stool.¹—Vomiturition, attended with severe pain in the epigastrium, and drawing in the calves of the legs, almost amounting to a cramp.¹—[20.] Oppression in the epigastrium through the night.¹—At 4 A.M. the feeling of load and oppression in the epigastrium, with throbbing and an undulating sensation all through the system.¹—Sharp pains in the stomach and bowels.³—Pain in the epigastrium, increased by turning in bed.¹—Pain in the epigastrium, increased by drinking water.¹—Soreness in the epigastric region.²

Abdomen.—Flatulency, confined to the stomach.¹—*Sharp pains in the bowels and stomach.³—Heat and sharp pain in the right side of the abdomen, in the evening.¹—The evacuations from the bowels seemed to proceed from the small intestines.¹

Anus.—[30.] Irritation in the anus, with exudation of mucus.²

Stool.—The evacuations are most frequent in the evening.¹—Evacuation from the bowels at 7 A.M., preceded by pain in the abdomen.¹—Copious evacuation of thin stools from the bowels, without pain.¹—Stools watery or frothy, voided without pain, and are followed by exhaustion.¹—Stool at 7 A.M., followed by numbness of the lower extremities.¹

Sexual Organs.—Discharge of semen during sleep, without erection.¹

Respiratory Organs.—*Asthmatic troubles.³

Heart.—*Audible beating of the heart, and slight pain under the left breast.¹

Neck and Back.—Pain in the nape, with perspiration.¹—[40.] Pain in the nape and back.¹—Pain in the nape and occiput, with coldness and stiffness in the feet.¹—Rheumatic pain in the back from stooping.¹—Pain and stiffness in the loins.¹—The pain in the loins is confined to the left side.¹

Extremities.—Stiffness of all the joints of the upper, as well as of the lower extremities.¹

Superior Extremities.—Pain in the right shoulder from lying on it.¹

Inferior Extremities.—Remarkable stiffness in the lower extremities.

ities, with slight coldness, and a tingling sensation,¹.—Stiffness in the knees when attempting to rise,¹.—Pain in the right knee,¹.—[50.] Drawing and shrinking sensation in the legs, and the most decided pricking in the soles of the feet,¹.—Numbness in the calves of the legs,¹.—Penetrating pain under and behind the left external malleolus, after sleeping,¹.—Stiffness of the joints of the toes, ankles, and knees, when lying,¹.

Generalities.—Aching in all the bones,¹.—Dulness and drowsiness, with disinclination to engage actively in business,¹.—It acted promptly and energetically, causing aching pains in nearly every part of the body, especially of the lower limbs and head,³.

Skin.—Vesicular eruption on the forehead, over the left eye, on the middle of the chest, and on the right arm,².—Violent itching eruption on the skin, generally with elevation of the skin (second day),².—Very great itching at night, with welts all over the surface,².

Sleep.—[60.] Sleepiness without the ability to sleep sound after midnight,¹.

Fever.—Coldness and stiffness in the feet,¹.—Fever,³.—Drying away of the perspiration, and development of fever, with hot skin and increased thirst,¹.—General perspiration,¹.

Conditions.—**Aggravation.**—(*Evening*), Heat and pain in right side of abdomen; evacuations. —(*Midnight*), On rising, giddiness. —(*When lying*), Stiffness of joints of toes. —(*After sleeping*), Pain behind left external malleolus. —(*Sitting up*), Headache. —(*Sleeping*), Pain in back. —(*Turning in bed*), Pain in epigastrium.

TROMBIDIUM MUSCÆ DOMESTICÆ.

Animal kingdom.

Class, Arachnida.

Order, Acaridea.

Preparation, Tincture of the animals.

Authorities. Jos. P. Harvey, M.D., Hahn. Month. 1, 1865, p. 83; one hundred and fifty were put into 50 drops of alcohol; **1**, Dr. Harvey, took 2 drops 3d dec. dil. at 11 P.M. (first day); 2 drops 6th dec. dil. at 11 P.M. (fifth day); 2 drops 9th cent. dil. at 11 P.M. (eleventh day); **2**, same, afterwards took 2 drops 12th cent. dil. at 11 P.M. (first day); 3 drops 18th cent. dil. at 11 P.M. (eighth day); **3**, Dr. Edwin Heath, took 2 drops 9th cent. atten., symptoms occurred on second and third days; **4**, J. F. R., took 2 drops of same at 3 P.M.; **5**, E. K. Bancroft, took 2 powders of 30th cent. atten. (first day); took Merc. (twelfth day).

Mind.—Unusually talkative during the day (second day),¹.—Talkative during the day, and disposed to be contrary (third day),².—Inability to collect ideas; absence of ideas,³.—Loss of memory,³.

Head.—**Vertigo.** On every attempt to rise from bed felt dizzy and faint, and had to throw myself back on the bed to prevent fainting (seventh day),⁵.—Dizziness of the head from lightness; it felt as if there was no weight in the head,³.—**General Head.** Lightness of the head,².—During the forenoon a dull feeling through the head (third day),¹.—In the evening congestion to the head, with red face and ears (tenth day),².—[10.] Oppressive headache,³.—Pulsation in the arteries of the head, with the fever (seventh day),⁵.—**Temples.** Dull, heavy, sometimes sharp pains in the temples, extending over the frontal regions, felt more severely in left

side (at 9.30 P.M.), (second day),¹.—Awoke with pain in the left mastoid process at 7 A.M. (third day),².—**Parietals.** Dull pain in left side of head, aggravated by shaking the head and walking, at 10 P.M. (fourth day),¹.—Shooting pains in the right side of the head, just above the temporal region, at 3 P.M. (fifth day),².—Shooting pain in the right side of head, near the parietal eminence, at 11 A.M. (seventh day),¹.—**Occiput.** Dull aching in the occiput, with the fever (seventh day),⁵.—**External Head.** Intolerable itching of the scalp, especially the vertex and occiput, at 7 A.M. (fourth day),¹.

Eye.—Redness of internal portion of the conjunctiva, similar to a pterygium (twelfth day),⁵.—[20.] Intolerable itching in the inner canthus of the right eye at 9 P.M. (fifth day),¹.—Lachrymation in the open air (fourth day),¹.

Ear.—Quite a burning sensation in the pinnae of both ears, felt more especially in the right, in the evening (tenth day),².—Shooting pain in right ear at 3.30 P.M. (third day),¹.—Shooting pains in right ear at 3 P.M. (sixth day),¹.—Shooting pains in the right ear (thirteenth day),¹.—Dull, but occasionally severe shooting pains in right ear, aggravated by swallowing or blowing the nose, in the forenoon (fifth day),².—Shooting pains in both ears, occurring quite frequently, and felt more severely in right one, in the afternoon (eleventh day),².—Severe shooting pains in right ear, frequently during the day and evening (twelfth day),².—Itching in both ears, soon after rising (fifteenth day),².

Nose.—[30.] Mucous discharge from anterior nares, worse while eating dinner (third day),¹.—On rising, the nasal passages were much obstructed, but in the afternoon and evening, fluent coryza, especially while eating, and in the open air (fourth day),².—Fluent coryza, brought on in the open air, and by eating (*all through the proving*). It gave place in the evening to a dryness and scabs in the nose (fourteenth day),².—Nosebleed in the morning (ninth day); in the afternoon (tenth day),⁵.

Mouth.—Teeth. Dull toothache all the evening, in a decayed tooth of the left side (thirteenth day),¹.—Dull pain in decayed teeth of left side at 11 P.M. (second day),².—Awoke at 7 A.M. with a toothache in a decayed tooth of left side, pain dull, which having abated somewhat, was renewed by eating breakfast, and continued till noon (fourteenth day),².—A severe dull pain in a decayed tooth of left side, brought on during the evening, by reading aloud for an hour, and which prevented sleep almost the entire night (twentieth day); it continued on the next day, until evening, when a dose of Staphisagria 200, relieved it; it was aggravated by lying down, by eating, talking, and from cold air; ameliorated by taking some warm drink into the mouth,².—**Tongue.** Tongue heavily coated with white coating (ninth day),⁵.

Throat.—Slight soreness in the right side of the throat (fifth day),².

Stomach.—[40.] No appetite (eighth day),⁵.—Eructations after meals, tasting of the ingesta (fourteenth day); lasting an hour after each meal (fifteenth day),².—(Two days after, vomited after breakfast, thought it was from drinking coffee),⁴.—Pain in the pit of the stomach (dull griping), aggravated by eating dinner (twelfth day),¹.

Abdomen.—Hypochondria. Dull aching pain in the region of the liver, just under the free ends of the floating ribs, aggravated by pressure, in the forenoon (third day),¹.—Sore, dull, aching pain in the region of the liver, just beneath the free ends of the floating ribs, place very sensitive to the touch, in the evening (seventh day),¹.—Pain in region of liver

just under the free ends of the floating ribs (thirteenth day),¹.—Darting pain in the liver, at 10 P.M. (fifteenth day),¹.—All day dull pain in the region of the liver, under the free ends of the floating ribs, sore to pressure (seventh day),².—Same dull pain that had been felt after each inhibition, in the region of the liver (fifteenth day),².—**General Abdomen.** [50.] The entire abdomen much distended, with flatulence, at 10 P.M. (fifth day),¹.—Tympanitic distension of the abdomen (sixth day),¹.—Abdomen distended with flatulence, causing slight colicky pains, at 11 P.M. (fifteenth day),².—Pain in the abdomen, as from incarcerated flatus, at 3 P.M. (second day),¹.—Dull pain in the abdomen, aggravated by pressure (third day),¹.—Gripping pain in the abdomen, before the brown diarrhœic stool (eighth day),¹.—Dull heavy pain over the whole abdomen, aggravated by drinking cold water, in the forenoon, and by eating dinner (twelfth day); same dull pain, worse by pressure, at 11 A.M. (thirteenth day),¹.—**Sudden gripping pain in the abdomen*, more on the left side, which induced a stool, which was passed quickly, at 1.30 P.M., but afterwards had considerable tenesmus, with slight prolapsus, followed by a pain, lasting for several minutes, as if excoriated; this stool relieved the pain only temporarily, as it returned in a few minutes with such violence as to force the perspiration from all parts of the body; after a few minutes it gradually abated in violence, until it became bearable; the pain was aggravated by eating dinner, to the same extent as before, causing another stool, followed by the most severe tenesmus I have ever experienced; the stool was composed of soft brown fæces mixed with mucus; there was prolapsus also; felt weak after this evacuation, especially in the knees; the pain soon ceased (thirteenth day),¹.—Slight pain in the abdomen, which was relieved by a diarrhœic stool, at 3 P.M. (fifteenth day),¹.—Awoke about 5 A.M. with severe sore pain in the abdomen, and urging to stool (seventh, eighth, and ninth days); pain and urging to stool, early in the morning (tenth day),⁵.—[60.] Eating seemed to bring on the pain in the abdomen, and desire for stool (eighth day),⁵.—*Immediately after rising was seized with a *gripping pain in the abdomen, obliging a stool*, which was diarrhœic, of a brownish color, and which relieved the pain until after breakfast, when it returned with greater violence and induced a second stool, accompanied with severe tenesmus causing prolapsus ani, and followed by a burning sensation about the anus, which lasted about an hour (tenth day),².—Dull pain in the abdomen, preceding and following the stool (seventeenth day),².—Darting pain in the abdomen, more in right side above the hip, at 10 A.M. (fifth day),¹.—Violent shooting pains in the abdomen, beginning in the left side, in the hypogastric region,³.

Rectum and Anus.—*Prolapsus ani and burning about the anus, after the stool (tenth day),².—Slight prolapsus ani with the second diarrhœic stool (eighth day),¹.—*Prolapsus with the stools (thirteenth day),¹.—Stitching pain for several times, upward along left side of anus (ninth day),⁵.

Stool.—Soft pappy stool (had been rather costive for some days), (fourth day); brown diarrhœic stool, with some tenesmus, preceded by pain in the abdomen, pain gripping, at 7 A.M.; another diarrhœic stool, with severe tenesmus and slight prolapsus ani, at 8.30 A.M. (eighth day); diarrhœic stool, with some straining and expulsion of flatus, at 9 A.M. (twelfth day); stool passed quickly, at 1.30 P.M.; after dinner a stool composed of soft brown fæces, mixed with mucus (thirteenth day); no stool (fourteenth day); diarrhœic stool, at 3 P.M. (fifteenth day); for a fortnight

afterwards was occasionally troubled with the same kind of diarrhœa as had been experienced ever since the second dose was taken, and which so increased in violence that it became necessary to take something to act as an antidote; *Mer. corr.* answered this purpose most admirably,¹.—[70.] *Diarrhœic stool of a brownish color, followed by a second stool (tenth day); at 10 A.M., diarrhœic stool, light brown in color, preceded and followed by a dull pain in the abdomen; at 2 P.M., another stool of same nature as above, and accompanied by some abdominal pain, and voided with much straining (seventeenth day),².—Passed a quantity of loose fœces, at 5 A.M.; during the day had several small loose stools, always preceded by terrible sore pain in the intestines, and attended with tenesmus and shivering along the back (seventh day); several stools during the day, most of which were small and consisted of mucus, and attended with severe tenesmus (eighth and ninth days); several mucous stools during the day (tenth day); diarrhœa better (eleventh day); better, having taken Mercurius (twelfth day),⁵.

Respiratory Organs.—Hoarseness (after five hours),⁴.—Slight hacking cough from irritation in the throat (fourth day),¹.

Chest.—Cutting pain in right side of chest, on the right of the lower part of the sternum, at 7 A.M. (ninth day),¹.—Shooting pains in left chest, in the region of the heart, at 7.30 A.M. (eighth day),¹.—Sharp pain in the lower part of the chest, at 7 A.M. (sixth day),¹.—Throbbing all over the chest, from 9 to 11 A.M. (tenth day),².

Heart and Pulse.—Dull pain in the region of the heart, rendered sharp by drawing a long breath, at 4 P.M. (second day),².—Darting rheumatic pains in region of heart (tenth day),⁵.—[80.] Pulse full and quick, 100, at 9 A.M. (usually 70); at 11 A.M. it had returned to its normal condition (tenth day),².—Pulse intermittent,³.

Back.—Aching pain in the small of the back, with the fever (seventh day),⁵.

Extremities.—Heaviness of all the limbs,¹.—Shooting pains in left heel and left wrist (fifth day),².—Shooting pains in different joints, during the day (sixteenth day),².—In the afternoon and evening, shooting pains in the joints of the upper and lower extremities (seventeenth day),².—Shooting pains (slight) in the different joints (eighteenth and nineteenth days),⁴.

Superior Extremities.—Shoulder. Rheumatic aching pain in left shoulder (ninth day),⁵.—Pain in the left shoulder (tenth day),⁵.—[90.] Severe shocks in left shoulder-joint, every few minutes, lasting the entire afternoon (sixth day); lasting all the forenoon (seventh day),².—Severe shooting pains in right shoulder-joint, at 2 P.M. (fifth day),².—Shooting pains in the right shoulder, in the forenoon (fifteenth day),¹.—Shooting pains in elbows, wrists, and finger-joints at different times, all the forenoon (ninth day),².—**Elbow.** In the forenoon, frequent shooting pains in the elbow, wrist, and finger-joints of the right side (eleventh day),⁴.—**Forearm.** Dull pain in the bones of the left forearm, at 12 M. (ninth day),¹.—Dull intermittent pain in left forearm, at 11 P.M., afterwards same shooting pains that seem to be characteristic of this remedy (third day),⁴.—Aching down the left forearm (tenth day),⁵.—Frequently occurring pain in the left forearm of a dull nature, in the forenoon (eleventh day),².—

Wrist. At 4 P.M. a sharp stinging pain at a single small spot on the inner side of the dorsum of the wrist, lasting about a minute (fourteenth day),².—[100.] Pains in right wrist-joint, at first shooting and intermittent, afterwards constant, lasting a few minutes, at 12 M. (fourteenth day),¹.—Shoot,

ing pains in outer side of right metatarsus, at 3 P.M. (twelfth day),¹.—**Fingers.** Shooting pain in phalangeal joints of third finger, and at same time in left knee-joint, in the forenoon (twelfth day),¹.—Shooting pains in phalangeal joints of second finger of left hand, at 8.30 A.M. (fourth day),².—A stinging pain in the palmar surface of right thumb, ungual phalanx (thirteenth day),².

Inferior Extremities.—**Hip.** Dull pain in left hip-joint, felt only after rising from a sitting posture and attempting to walk, and which produced a limping gait; this pain was felt every time an attempt to walk was made, during several hours; it usually wore off each time after taking a few steps (fourteenth day),².—**Thigh.** Tearing pain in lower part of left thigh, at 2.30 P.M. (second day),¹.—Flying sharp pain in the right thigh, at 9 A.M. (fourth day),¹.—**Knee.** Rheumatic pain in left knee (eighth day),⁵.—Rheumatic aching pain in left knee (ninth day),⁵.—[110.] Slight intermitting pains in the right knee-joint, at 9 A.M. (fourteenth day),¹.—**Leg.** Boring pain in right tibia, during the forenoon (twelfth day),².—**Ankle.** Dull pain in the left ankle, inner part made sharp, by bearing weight on it, at 12 P.M. (sixth day),¹.—Shooting pains in right ankle, at 3 P.M. (fifteenth day),¹.—**Foot.** Tearing pain in tarsus of left foot, at 1 P.M. (fifth day),¹.—Shooting pains in the left tarsal joints, at 6 P.M. (second day),².—Dull shooting pain in the left heel, inner side (tenth day),¹.

Generalities.—Inability to keep quiet,².—Weakness (eleventh day),⁵.—Weakness, especially in the knees, after a stool (thirteenth day),¹.—[120.] Great weakness, able to walk about some, but easily tired (eighth day),⁵.—Rheumatic pains in left shoulder, arm, knee, and in the region of the heart (eleventh day),⁵.—Felt better in the open air,³.

Skin.—Itching in spots on the chin and among the whiskers,³.—Pimples on the back of the neck, in the evening (fourteenth day),².—Itching sensation about the neck and on the chin, among the whiskers, in the evening (fourteenth day),².

Sleep.—Almost constant inclination to gape (third day),¹.—Constant disposition to gape, through the day (third day),².—Constant inclination to gape, in the afternoon (teath day),².—Sleepiness (after five hours),⁴.—[130.] Restless during sleep,⁴.—Wakeful and restless, after 4 A.M. (eighth day),¹.—Lewd dreams during the night (seventh day),¹.

Fever.—Chilliness felt during the night, more in the morning, on waking,⁴.—Chilliness along the spine, with the stool (seventh morning),⁵.—In the afternoon had fever, with pulsation of the arteries of the head, and dull aching in the occiput, and with this an aching pain in the small of the back (seventh day),⁵.

Conditions.—**Aggravation.**—(Morning), On waking, chilliness.—(Open air), Lachrymation.—(Cold air), Toothache; pain in abdomen.—(Blowing nose), Pain in right ear.—(Eating), Toothache; coryza; pain in stomach; pain in abdomen.—(Lying down), Toothache.—(Pressure), Pain in liver; pain in abdomen.—(Rising from bed), Dizziness.—(Shaking head), Pain in left side of head.—(Swallowing), Pain in right ear.—(Talking), Toothache.—(Walking), Pain left side of head; pain in hip.

Amelioration.—(Open air), Feels better.—(Warm drink), Toothache.

TUSSILAGO FRAGRANS.

Petasites fragrans, Moench.

Natural order, Compositæ.

Common name, Italian or fragrant Tussilage.

Preparation, Tincture of whole plant.

Authority. Dr. Demeures, Journ. de la Soc. Gall., vol. iv, p. 109, three drops on the tongue.

Mind.—State of mind such that I was satisfied with everything; everything about me seemed pleasing; serenity of disposition; benevolence of language; I could engage in discussions of the most exciting interest with calmness, while making use of the most appropriate expressions; in fine, entering upon them without hesitation, and succeeding in them, being beforehand confident of success (fifth to tenth day).—Complaining mood, finding fault with everything, making spiteful remarks, the nature of which he does not himself recognize, and is astonished that others are offended at them; for this reason, when aware of their character, he remains silent for fear of offending his associates (after four hours).

Head.—Transient headache, like a stupefaction; feeling of intoxication, as after the abuse of spirituous liquors (after two hours).

Eye.—Dryness of the eyes, when looking about in the open air, forcing them to wink often (after two hours).

Throat.—Acidity in the œsophagus, like heartburn, ceasing entirely after dinner (after two hours).

Stomach.—It seems as if there were at the bottom of the cardia a morsel which will not pass down (after half an hour).

Inferior Extremities.—Weakness in the legs (after two hours).—Pain from side to side in the tarsus, between that and the metatarsus of the left foot, when walking; this pain does not last long, but returns often (second to fifth day).—Pain in the metatarsal joint, as if caused by a blow (after two hours).

Generalities.—[10.] January 5th (ninth day) I started for Toulon; I returned thence on the 12th, stouter in person than on my departure. I often take this journey, and at my return I always have been reduced in flesh, owing to irregular diet. From January 10th to February 5th, this increase in size continued, and was perceptible to myself; but, on the other hand, I felt, after the 10th of January, a degree of plethora, which might easily have overcome me. The abdomen, which had a tendency to corpulency, was reduced to its normal size. Eight years later it had not yet regained that former protuberance.

Sleep.—I sleep less, and find myself none the worse for it, a circumstance which certainly never occurred to me before (after two weeks).

Fever.—Sweat and heat of the skin, caused by slight exertion, such as never had caused perspiration (after half an hour).

TUSSILAGO PETASITES.

Properly PETASITES.

Petasites vulgaris, Desf. (*Tussilago petasites*, Linn.)

Natural order, Compositæ.

Common name, Butter-bur.

Preparation, Tincture of the whole plant.

Authorities. (Kuchenmeister, A. H. Z., 32, 131, tincture made from the whole plant at the time of flowering) 1, F. K., æt. twenty-four years, took 10 drops in the evening (first day), 25 drops in the morning, 30 in the evening (second day), 60 morning and evening (third day), 100 in the morning, 120 in the evening (fourth day), 170 in the morning (fifth day); 1a, after a week, same, took four spoonfuls; 2, C. A. F., æt. twenty-three years, took various doses of the tincture, from 10 to 550 drops; 3, A. F. U., æt. fifteen years, took doses of 10 to 120 drops; 4, C. G., æt. eighteen years, took doses of 7 to 80 drops of fresh juice, and with alcohol; 5, Rosalie R., æt. twenty-five years, took 30 drops; 5a, same, took 60 drops morning and evening; 6, Christiana G., took 15 drops (first and second days), 100 drops (third day), afterwards six spoonfuls, etc.

Head.—Some confusion of the head, in the evening, more towards the left side (fourth day),¹.—Vertigo,⁵.—Dizzy on waking, in the morning (fourth day),¹.—Dulness of the head,⁶.—Dulness and heaviness of the head,¹.—Dull headache in the forehead,⁵.—Transient headache (one hour after 10 drops),².—Constant headache (after six days),¹.—Headache in the left side of the upper part of the forehead, thence extending slowly over the vertex, as if under the dura mater, like a tearing pain; after two hours, headache seated over the right eye, with a sensation as if the supraorbital muscles would be drawn upward, obliging him to wink; in the afternoon the headache returned in the vertex, and, in the evening, again in the temporal region (third day); the next day, on waking, the headache was in the left side of the vertex, extending forward to the right eye,¹.

Mouth.—[10.] (Toothache all day, aggravated by cold drinks, especially violent in bed, relieved after taking Mercury),³.

Throat.—Pain and burning in the uvula (third and fourth days),¹.—Sore throat and pain on swallowing (after 30 drops),².

Stomach.—Eructations,⁶.—Frequent eructations (third day),¹.—Numerous eructations always after drinking (after six days),¹.—Nausea,⁶.—Pain in the pit of the stomach (fifth day),¹.—Burning in the epigastric region,⁴.—Pain about the pylorus, at the point where the sternum and ribs form a triangle, aggravated by pressure (fourth day),¹.

Abdomen.—[20.] Colic,⁶.—Colic, relieved by emission of flatus (second day),¹.

Stool.—In the afternoon a second soft but formed stool, followed by desire for stool (second day),¹.—Absence of the usual stool after dinner (fourth day),¹.—Several unsatisfactory stools in one day,¹.

Urinary Organs.—Pressed out a drop of yellow mucus from the urethra before urinating, though the urethra was not inflamed (fourth day),¹.—Crawling in the urethra, obliging scratching, with erections,⁴.—Micturition increased,⁴.—Urine very profuse, but not evacuated often (fourth day),¹.

Sexual Organs.—Jerking pain in the spermatic cord, causing him to bend backward (sixth day),¹.—[30.] Drawing in the right testicle (fifth day),¹.

Chest.—Tightness of the chest (fifth day),¹.—Oppression in the right side of the chest,⁶.

Heart.—Once there was a sudden stitch in the left side of the præcordial region on deep breathing (fourth day),¹.

Back.—Pain in the small of the back on standing and stooping,⁶.—Pain in the small of the back, especially distressing on rising from a seat; this became so violent that stooping was extremely difficult and painful,

and was particularly severe on rising up; after a few days, it continued so violent that I took a dose of Sulphur (sixth day).¹—Pain in the small of the back, especially troublesome when walking or going upstairs and on rising from a seat.^{1a}—Violent pain in the small of the back.⁶

Extremities.—Increased stiffness of the limbs, at night.²—Pain in the middle of the right tibia, confined to a small spot (third day).¹

Generalities.—[40.] Weakness.^{5 6}

Skin.—Itching on the forehead and beard (second day).¹

Sleep.—Restless sleep.^{2 5a}—Numerous dreams (fourth day).¹—Dreams at night.⁵

Fever.—Cold feet (sixth day).¹—Morning sweat.⁶—Perspiration at night.^{5a}—Profuse perspiration at night.⁶

Conditions.—**Aggravation.**—(*Morning*), Sweat.—(*Night*), Stiffness of limbs; sweat.—(*Cold drinks*), Toothache.—(*After drinking*), Eructations.—(*Going upstairs*), Pain in small of back.—(*Pressure*), Pain about pylorus.—(*Standing*), Pain in small of back.—(*Stooping*), Pain in small of back.—(*Rising from sitting*), Pain in small of back.—(*Walking*), Pain in small of back.

UPAS.

Strychnos tieuté.

Natural order, Apocynaceæ.

Common name, Ipo of Borneo (not of Massachar, which is Upas antiar).†

Authorities. 1, Dr. Pitet, Journ. de la Soc. Gall., 1st ser., vol. iv, p. 65, took drop doses in water, beginning with 15th dil., left off (fifteenth day), began taking 3d and 2d dils. (twenty-fourth day), 1st dil. (twenty-sixth day), drank in twenty or thirty swallows half a liter of water, to which had been added 5 drops diluted tincture (twenty-eighth day), mixed 10 drops tincture with same quantity of water (twenty-ninth day), 20 drops tincture in same quantity of water and in portions at half-hour intervals (thirtieth day), handled the Upas tieuté in preparing 30th dil. and some symptoms reappeared (fifty-eighth day); 2, same, *Mad. M. Th. P.*, æt. twenty years, took 15th dil.; 2a, same, took 1st dil.; 2b, same, took 20 drops tincture in half a liter of water; 3, Dr. Mannkopff, *Wien Med. Woch.*, 1862 (A. H. Z. M. B.), a man took 3 grains; 4, Morris Wiener, M.D., from M.S., took 2 drops 3x in a teaspoonful of water (first day), 3 drops 6x in water at 7 A.M. (third day); 5, same, took 1 drop 3x in water at 6 A.M. (first day), 20 globules moistened with 3x (third and fifth days), 40 pellets (sixth day), 6 drops 12x in morning and at 11 P.M. (seventh day); 6, same, took 1 drop 3x at 10 P.M. (first day), 5 drops (second day).

Mind.—Very lively mood.³—Depressed spirits; aversion to speaking (seventh day).⁵—Great moral sensibility (fourteenth day).¹—Melancholic, has to force the tears back; cold towards his friends, repelling every one (sixth day).⁵—Morose (second day).⁶—Morose and irritable (first day).⁵—Morose without cause; easily exasperated; likes to quarrel (third day).⁵—Morose and does not want to speak (fifth day).⁵—Cross, irritable, after

† "Upas antiar" is *Antiaris toxicaria*, of Java, a tree concerning which the most wonderful stories have been told. The accounts of Fœrsch, translated from the Dutch and published in the *London Magazine*, 1784, have been freely copied, but are utterly untrue. An arrow poison of Java, the "Siren-boom," is prepared from the bark of this tree, which is very poisonous; we have, however, no reliable accounts of its actions on men. •

going to bed (second night),⁴.—[10.] Irritability, sensitiveness (thirty-second day),¹.—Irritability, irascibility (twenty-ninth day),¹.—Thinking is laborious and difficult; transient cloudiness of the mind (thirtieth day),¹.—Extreme difficulty in fixing the attention (thirty-fifth day),¹.—Sensible weakening of the memory several days past (fortieth day),¹.—Very marked diminution in readiness of thought; inability to concentrate the attention, to express himself, to apply technical expressions, to recollect; irritability; very marked diminution of muscular strength; these symptoms continue, becoming more and more marked for several days (forty-first day),¹.

Head.—Vertigo. Head muddled (as if proving *Cocculus*), (sixth day),⁵.—Vertigo, as if falling; this lasts only a few seconds, and terminates with a pressing headache in the forehead (third day),⁵.—**General Head.** Dull pains in the brain (forty-third day),¹.—Headache all over the head after going to bed (second night),⁴.—[20.] Pressive heaviness throughout the head; great tendency to feel cold (thirty-sixth day),¹.—Some twitchings in the brain and the orbits (thirty-second day),¹.—Severe pulsating pain all over the head, on waking in the morning, disappearing in the open air (third day),⁵.—**Forehead.** Slight frontal headache,³.—Pain in the forehead (after second dose, seventh day),⁵.—Constant dull tearing pains in the forepart of the brain, on the right side (in the afternoon), worse when walking (afternoon and all the evening), (twentieth day),¹.—From time to time, during the day, dull and prolonged shootings in the right anterior lobe of the brain (twenty-ninth day),¹.—Dull pain or shootings, sometimes dull, sometimes sharp, in the anterior portion of the brain, chiefly on the right side, etc., *ut supra* (thirtieth day),¹.—Dull deepseated pains in the base of the right frontal lobe, above the orbit (thirty-fourth day),¹.—Sharp contusive pains in a line with the left frontal eminence, aggravated by movement, walking, and especially by going upstairs, to such a degree that it seems as if the brain were rudely shaken, from morning to midday (forty-first day); on the following day these symptoms diminish,¹.—[30.] Boring shootings, very sharp and deepseated, in the left side of the forehead, near the temporal fossa (thirty-fifth day),¹.—Boring pain, which is felt simultaneously in the frontal eminence and in the occipital protuberance of the left side (twenty-sixth day),¹.—Frequent dull shootings in the frontal lobe on the right side (twenty-eighth day),¹.—Some dull twitchings in the anterior left side of the brain, above the orbit (eighth day),¹.—Some twitchings in the anterior lobes of the brain (twenty-ninth day),¹.—Pulsating headache in the forehead and through the left eye, with pressure, as if the eye were pressed inward, in the evening, after going to bed (second day),⁵.—**Temples.** Every few moments pressure in both temples, especially the left (fifth and sixth days),¹.—Sharp pressure in the left temple (in the evening), (forty-first day),¹.—Superficial drawing pain, which, every few moments, traverses the left temple from before backwards, and ceases at the outer angle of the orbit; the part is hot and painful to touch; this pain was felt all day yesterday, and this morning subsided into a dull pain (fifth and sixth days),¹.—**Vertex and Parietals.** Pressure on the vertex (first and second days),⁶.—[40.] Pressure, painful heaviness in the top of the head (thirty-fifth day),¹.—Dull pains in the right side of the brain, sometimes in front, sometimes behind, or inside the orbit, near the root of the nose, with feeling of internal heat, uneasiness in the whole head, and sometimes sharp lancinations in the brain and the orbits (forty-fourth day),¹.—Several shootings deep in the brain on the right side (seventh day),¹.—In the forenoon, boring shootings in the parietal region of the right side of the brain (twenty-fourth

day),¹.—Some dull shootings in the right side of the brain (thirty-second day),¹.—Frequent shootings in the right side of the brain (fortieth day),¹.—Some pains in the right side of the brain (forty-first day),¹.—Violent shootings in the right side of the head,².—Frequent shootings in the brain, chiefly on the right side (thirty-seventh day),².—**Occiput.** In the afternoon painful heaviness in the occiput, accompanied with throbbing isochronous with the arterial pulse (as after sexual excess), (twenty-fifth day),¹.—[50.] Dull pressure, pressive weight in the posterior part of the cerebrum and cerebellum (thirty-fifth day),¹.—Headache in the occiput, a pressing-inward pain, for more than a fortnight (after two days),⁵.—**External Head.** Scalp numb, as if going to sleep (first day),⁶.

Eye.—Eyes sunken, with bluish rings around them (seventh day),⁵.—Dull pains in the right eye, in the evening, for several hours in succession (twenty-fifth day),¹.—Painful pressure and sensation as of a foreign body in the left eye, when opening and shutting it,².—In the morning, when waking, sensation of *pressure* and of *dryness* in the eyes, preventing the lids from opening, as if there was sand in them (symptom previously experienced after a dose of this medicine), (fourth day),¹.—When opening the eyes, sharp and burning pain, like that caused by the presence of a foreign body (fifth and sixth days),¹.—Sharp pain, composed of burning, together with a feeling as if from a foreign body, especially in the left eye, and chiefly when opening and shutting the lids (fifth and sixth days),¹.—The eyes are weak, as after sexual excesses (twenty-fifth day),¹.—[60.] *Every morning weakness of the eyes, with lachrymation, the lids being so heavy that they close involuntarily, as if from irresistible drowsiness,*^{2a}; (twenty-eighth day),¹.—Same symptoms of the eyes as on the preceding days; they are very weak; the outer canthus of the left eye is the seat of very acute itching (twenty-ninth day),¹.—*Every morning* weak eyes; itching smarting in the canthi, feeling as of a foreign body, etc. (thirty-fifth day),¹.—The condition of the eyes is aggravated; in the morning they are weak and close involuntarily; constant feeling as of a foreign body under the lids; on the inner surface of the right lower lid, near the margin, a small white miliary pustule, hard, and surrounded with a violet circle; redness of the palpebral conjunctiva; itching smarting in the outer canthi; all day, sensation as if there were sand in the eyes (thirty-sixth day),¹.—The symptoms of the eyes continue, accompanied with heaviness of the head, heat in the head and in the eyelids, which are red and congested; I inhaled a dilution of *Bryonia*, and the symptoms of blepharo-conjunctivitis were sensibly alleviated at the approach of evening (thirty-eighth day),¹.—The sensation of sand in the eyes returns, accompanied with itching and congestion of the lids, and smarting itching and ulcerated feeling in the outer canthi (forty-third day),¹.—All the symptoms of the eyes instantly reappeared; sensation of distress, of pressure, as from sand under the lids; vivid redness of the conjunctiva, the margin, and the angles of the lids, etc., all day long, and especially in the morning (fifty-eighth day),¹.—**Orbit.** Dull pain in the left orbit when opening or shutting the eyes (fifth and sixth days),¹.—Dull pain in the floor of the right orbit, in the morning (fourteenth day),¹.—Dull pain above the nasal bone, at the internal portion of the orbit, sometimes on the right side, sometimes on the left (forty-fifth day),¹.—[70.] In the morning, dull and prolonged shooting in the outer angle of the orbit, even into the nasal bone, on the right side (twenty-ninth day),¹.—Dull shootings in the right orbit and in the frontal lobe of the same side (thirty-eighth day),¹.—Frequent dull shootings in the right orbit, sometimes on

the left side (in the evening), as on the preceding days (fortieth day),¹.—Shootings in the left orbit,².—Violent lancinations in the anterior and internal portion of the orbit, in the morning, sometimes before getting up (forty-third day),¹.—Violent lancinations in the right orbit before getting up (forty-third day),¹.—Prolonged and violent lancinations under the orbit, on the right side (forty-fifth day),¹.—In the morning, before getting up, severe dull lancinations in the internal portion of the right orbit, on the bone at the root of the nose (forty-fifth to fiftieth day),¹.—**Lids.** Flow of blood from the eyelids (twenty-seventh day),¹.—Same condition of the eyes; the small pustule on the right lower lid increases in size, becomes hard, and resembles a cyst (thirty-seventh day),².—[80.] Styte on the left upper eyelid; itching of the outer canthus with ulcerated feeling (as on the preceding days), (thirty-first day),¹.—Redness and heat in the eyelids, chiefly in the left (fifth and sixth days),¹.—In the morning, and in the afterpart of the day, redness and itching in the eyelids, chiefly in their margins (twenty-fifth day),¹.—Acute itching and congestion of the eyelids, chiefly in the morning (twenty-eighth day),¹.—Itching in the border of the outer surface of the lower lids (fifth and sixth days),¹.—Intense smarting itching in the outer canthi, in the evening; it seems as if they were ulcerated,²; (thirtieth day),¹.—Amelioration of the eye symptoms; there only remains a sharp itching of the lids (fortieth day),¹.—**Lachrymation.** Weeping of the left eye (second day); weeping of the eyes lasted more than a fortnight,⁶.—**Conjunctiva.** Considerable amelioration of the blepharo-conjunctivitis (thirty-ninth day),¹.—**Ball.** Dull shootings in the left eyeball, in the evening (twelfth and thirteenth days),¹.—**Pupil.** [90.] Pupils contracted,³.—**Vision.** Dimness of sight; letters running together; fog before the eyes (second day); the dimness lasted more than a fortnight,⁶.—In the open air dimness, and as if endless strings of white and transparent globules were floating in the air (third day),⁴.—After rising from a stooping position, blackness before the eyes, as if all the blood were rushing to the head, with vanishing of thoughts (third day),⁵.

Ear.—At intervals, dull tearings in the inmost part of the cartilage of the concha of the left ear (thirty-sixth day),¹.—Twitchings in the cartilages of the left ear, near the orifice of the external meatus (fortieth day),¹.—Boring sensation in the right external auditory passage, often repeated (a symptom frequently felt during the proving), (fiftieth day),¹.—Burning on right outer ear (second day),⁶.—Both ears stopped, without affecting the hearing (third day),⁵.

Nose.—Violent sneezings and coryza,².—[100.] Coryza (third day),⁵.—Violent fluent coryza towards and during the evening, until falling asleep (second day); a fluent coryza in the forepart of the day lasted longer than a fortnight,⁶.—First, the right nostril, and shortly after, the left stopped up; this changes every few minutes and prevents sleep, in the evening after going to bed (second day),⁵.—Left nostril stopped up and discharging greenish mucus (as in Pulsatilla), (fifth day),⁵.—Smell as if smelling manure (fifth day),⁵.

Face.—Yellow complexion (seventh day),⁵.

Mouth.—Tongue coated white (seventh day),⁵.—Tongue coated white; this coating so thick that it can be scraped off (first day),⁶.—After swallowing the medicine, dryness of tongue and throat (first day),⁵.—Burning on the tongue (immediately),⁶.—[110.] Unable to open his mouth to speak (after one hour),³.—Blisters on the inner side of under lip, towards the left (fifth day),⁵.—Slight burning in the buccal cavity (first day),⁴.—Frequent

itching of the palate (twenty-eighth day).¹—Much saliva, which tastes sour (seventh day).⁵—Sour taste (immediately after second dose, seventh day).⁵—Bitter taste on the root of the tongue (seventh day).⁵—Taste like old coryza (third day).⁵

Throat.—(A habitual hawking of grayish mucus, in the morning, which lasted since more than a year, did not appear this morning (sixth day), and not afterwards).⁵—Pains and acidity in the left side of the throat when swallowing (thirty-sixth day).¹—[120.] The sensation of acidity in the throat extends to the left ear, and the pulse is more frequent than usual (thirty-sixth day).¹—Scraping in the throat causing cough, which produces a sore pain in the thorax, in the morning; at 9 P.M. every symptom of a severe inflammation of the throat appears; burning and soreness in the throat, cough, with severe burning pain, as if the throat would burst, with difficult expectoration of bronchial mucus (second day); every symptom aggravated (third day).⁴—Pain, as from a splinter, in the left side of the throat, making deglutition painful, as if the food were prevented from passing into the stomach by a foreign body lodged in the œsophagus; the swallowing of fluids becomes difficult; pressing the left side of the throat causes a feeling of suffocation (third day).⁵—While writing, a sensation as if the right tonsil were swollen, which is not the case, and severe palpitation (seventh day).⁵—The symptoms of the throat are equally persistent (thirty-seventh day).^{2b}

Stomach.—No appetite (second day).⁴; (sixth day).⁵—Total loss of appetite; aversion to all food, especially meat and eggs, the mere thought of which produces nausea (seventh day).⁵—Aversion to meat; hunger, but no desire for food after swallowing the first morsel (second day).⁵—Urgent thirst, bitter risings, and after a meal, risings tasting of the ingesta, all day.²—Violent eructations of wind (after half an hour).³—[130.] Qualmishness, and a feeling as if going to faint (third day).⁵—A peculiar sensation of heaviness in the stomach.³—In the morning, while hiccoughing, pinching in a line with the lumbar vertebræ (twentieth day).¹

Abdomen.—Pressing pain in the region of the liver (first day).⁶—Pressing pain in the liver (seventh day).⁵—Outward pressure in the left hypochondrium (seventh day).⁵—Stitches in the region of the liver and right kidney, in the evening (second day).⁴—Shortly after rising, on going outdoors, ulcerative pain in the left side of the umbilicus (twenty-ninth day).¹—Much flatulency, wind pressing against both hypochondria, and in breaking, giving no relief; flatus odorless (third day).⁴—Rumbling in the bowels (seventh day).⁵—[140.] Smart pinching in the left side of the abdomen, a little below the line of the umbilicus (after repeated doses), (ninth day).¹—Sharp pains in the left iliac fossa, aggravated by drawing breath, and by touch.²

Rectum and Anus.—Sharp colic in the rectum, relieved by emission of fetid flatus; shortly afterward, a soft stool, preceded by renewed colic (forty-third day).¹—Lancinations or slow pinchings, which appear to affect the cellular tissue exterior to the rectum on the right side, for several days in succession (forty-third day).¹

Stool.—During several days, two soft diarrhœic stools every day, and on the third day, great prostration (after several doses).²—Two soft stools every day.²—Soft stools the first days (tenth day).¹—Soft stool preceded and accompanied by colic (thirty-first day).¹—Mushy stool (second day).⁶—Stool mushy and easy (third day).⁴—[150.] An hour after the accustomed stool, a smaller one, mushy, reddish, terminating in a discharge of brownish

jellied mucus (third day),⁵.—Stool constipated, after much pressing, and insufficient; the same brownish, jellylike mucus after stool (fifth day),⁵.—Stool like yesterday, but a sensation as if a severe diarrhœa would set in (sixth day),⁵.—Feeling as of approaching diarrhœa; stool mushy, with much flatulency (seventh day),⁵.

Urinary Organs.—Pain in the region of the right kidney during the night (fifty-eighth day),¹.—For two nights in succession, dull pains in the renal region of the right side (as after sexual excesses), (thirty-ninth day),¹.—Stitches in the region of the right kidney (second day),⁴.—Frequent urging to urinate, with burning in the urethra, at 8 A.M. (second day),⁴.—Urine scanty, evacuated with great effort, bright red,³.—Urine dark, like brandy (second day),⁴.

Sexual Organs.—[160.] Erections and diminished venereal desires (fifth and sixth days),¹.—After going to bed, violent erections (second night),⁴.—Since this proving commenced, less desire for an embrace; great and permanent depression of the virile functions (twenty-ninth day),¹.—Depression of the virile functions; no desire for an embrace, and awkwardness in the act, continuing from the date when I previously recorded these functional disturbances; on one occasion an embrace was accompanied with a general feeling of painful and enervating uneasiness, and was followed by great depression for several minutes (fortieth day),¹.

Respiratory Organs.—Feeling of roughness in the air-passages (second day),⁴.—Hoarseness, voice deeper than usual, in the morning; later in the day not able to utter a word, like aphonia (third day),⁴.—Dry cough, increasing during the day, caused by a feeling of soreness in the larynx and trachea, with expectoration of colorless mucus; cough aggravated towards evening (first day),⁴.—Quickened respiration, in the morning,^{2b}.—Inability to breathe deeply, caused by a feeling of having an iron hoop around the waist (seventh day),⁵.

Chest.—Feeling of tightness in the chest (second day),⁵.—[170.] Pinching-drawing pains all around the base of the chest,^{2b}; (thirty-fifth day),¹.—Lancinating pain, like knife-thrusts through the right lung towards the liver, stopping the breathing (third day),⁴.—Several sharp lacerations, like needle-thrusts, across the chest, below the left nipple, in a line with the sixth rib (forty-fifth to fiftieth day),¹.—Transient sharp pinchings under the anterior margin of the right false ribs (forty-fourth day),¹.—Cutting and oft-repeated pinchings in the middle of the right side of the chest (forty-fifth day),¹.—From time to time, similar, but less intense shootings on the left side (twenty-fourth day),¹.—Short and smart pinching in the left side of the chest, on the outside of the great pectoral muscle (tenth day),¹.—Stitches through the right lung, in the evening (second day),⁴.

Heart and Pulse.—After going to bed, severe palpitation and pulsation all over from the vertex, where it appears as a pulsating headache, down to the tips of the fingers (first night),⁴.—While writing, severe palpitation, and a sensation as if the right tonsil were swollen, which is not the case (seventh day),⁵.—[180.] Frequent pulse, in the morning,^{2b}.—In the evening, pulse 65 (normally, three or four hours after the evening meal, my pulse varies between 50 and 55, and rarely goes up to 60), (twenty-eighth day),¹.—Pulse weak, small, and slow, 65 (normal in my case 75), (seventh day),⁵.

Neck and Back.—Painful stiffness of the posterior muscles of the neck, in the morning,².—Pain in the whole length of the superior fasciculi

of the right trapezius muscle during their contraction, morning and night (third day),¹.—Pains in the posterior part of the neck,².—Burning on right side of nape of neck (second day),⁶.—Feeling of stretching along the spine (after half an hour),³.—Pressure and feeling as if beaten in the spinal column, most severe in the region opposite the stomach (first day),⁵.

Extremities.—Hangnails, which become inflamed, with pain as if ulcerated; itching and redness of the roots of the nails (seventh day),⁶.—[190.] Great lassitude of upper and lower extremities; weakness aggravated towards evening (first day),⁴.—Numbness of the hands and feet (after twelve hours),³.—Often, and for a long time, pains in the joints or the bodies of the metacarpus or phalanges of the left hand; sometimes, also violent pinchings in the plantar surface of the left foot (forty-fourth day),¹.—Pains in the joints of the fingers and toes (twenty-ninth day),¹.

Superior Extremities.—Pinching pains along the track of the nerves of the left arm (forty-first day),¹.—Drawings in the right wrist-joint (thirty-sixth day),¹.—Dull pains in the right first metacarpal bone (forty-fifth day),¹.—Drawing pains in the second joint of the right ring finger (twenty-fifth day),¹.—Pretty frequent painful drawings in the joints of the left *middle* and *ring* fingers (fortieth day),¹.—Sharp, deepseated, lancinating pains in the palmar surface of the left middle finger (thirty-ninth day),¹.

Inferior Extremities.—[200.] Pinching in the posterior portion of the left thigh, even to the popliteal space along the track of the sciatic nerve (twenty-ninth day),¹.—Pain in the knee-joint (behind and above the patella) on the right side, aggravated by extension and pressure, for two days and two nights (seventh day),¹.—Dull pains, sometimes in one knee, sometimes in the other (twenty-fifth day),¹.—For many days frequent dull pains behind the knee-pan, sometimes to the right, sometimes to the left (forty-fifth day),¹.—Intermitting dull pains in the anterior part of the right tibia (during several days),¹.—Long and sharp needle-thrusts in the anterior middle portion of the right leg (tenth day),¹.—Frequent lancinations in the left calf,².—Pain in the left calf,².—Drawing pains in front of the right ankle-joint (thirty-fifth day),¹.—Repeatedly, while stooping, and consequently when bending the lower limbs, sudden cutting pain in the *tendo Achillis* of the left side (twenty-eighth day),¹.—[210.] Lancinations in the left os calcis, in the morning (forty-fifth to fiftieth day),¹.—Violent and dull lancinations in the left os calcis (forty-fifth to fiftieth day),¹.—Frequent lancinations in the left heel (fifty-third day),¹.—Dull pains in the heels, chiefly in the left heel,²; (twenty-sixth day),¹.—Sharp pains in the right great toe-joint (fortieth day),¹.

Generalities.—Clonic spasms of the muscles of the nape of the neck or extremities, which were at one time extended, at another flexed; these paroxysms were repeated spontaneously or by the slightest irritation, and without pain; between the paroxysms the muscles were completely relaxed,³.—Sudden jerking of the whole body, followed by violent stretching of the extensors, with drawing backward of the head (after one hour),³.—Great weakness and exhaustion after a paroxysm,³.—Weakness, as if going to swoon (first day),⁵.—Great muscular weakness (third day),⁵.—[220.] Very tired on waking (third day),⁵.—Weakness, as if not able to walk (third day),⁵.—Great prostration (sixth day),⁵.—General uneasiness, in the morning,².—General uneasiness, in the afternoon; general prostration and very marked diminution of muscular strength (fiftieth day),¹.—General uneasiness; increased sensitiveness to cold; pulse accelerated; pale face (fifth and sixth days),¹.—Amelioration of all the symptoms, in the evening after

dinner (fifth and sixth days),¹.—Dull nephritic pains at night, and especially in the morning (as after sexual excess); they cease soon after rising (twenty-fifth day),¹.—Great aggravation, in the afternoon and evening (second day),⁴.

Skin.—Herpetic eruption on the upper lip on the left side (fifth and sixth days),¹.—[230.] For two days past, eruption of conical red pustules, sore to touch, under the lower lip, near the left commissure (twenty-ninth day),¹.—At the inner border of the left wrist-joint intense and obstinate itching, without eruption, which is felt at intervals for nearly a quarter of an hour each time, and is a little relieved by pressure, during three days (twenty-ninth day),¹.—Itching of the pubes, almost constant, during several successive days (thirty-fifth day),¹.

Sleep.—Almost irresistible drowsiness, in the morning (thirty-fifth day),¹.—Difficulty of falling asleep (sixth night),⁵.—Cannot fall asleep before 2 A.M. (seventh night),⁵.—Frequent waking at night, caused by great dryness of the throat (first night),⁴.—For several days past very restless sleep (twenty-ninth day),¹.—Night restless, unrefreshing sleep (fifty-eighth day),¹.—This night, towards morning, I dreamed of feeling an intolerable itching in the eyelids, especially in the left lower eyelid, near its outer canthus, and that the latter was lined with hardened puriform mucus, which I tried to take off (twenty-ninth day),¹.—[240.] Dream of a coronation (sixth night),⁵.

Fever.—Feels chilly very easily; passing shiverings,^{2b}; (thirty-fifth day),¹.—Shivering; burning in palms of hands after dark (seventh day),⁵.—Shivering along the spine and both arms (first day),⁶.—Flashes of heat and of redness in the face and hands, in the evening, after a meal (twenty-seventh day),¹.—Flushes of heat and redness of the face and head, in the evening after a meal, with drowsiness (thirty-fourth day),¹.—Heat of the head with red face,^{2b}.—Heat of the head with red face; at the same time the sensation of dust in the eyes is felt in the highest degree; the redness of the palpebral conjunctiva is intense, and accompanied with sharp burning, chiefly after the evening meal (thirty-sixth day),¹.—The left half of the face is red and hot, and the right side pale and cold,^{2b}.—Night-sweat (first night),⁴.

Conditions.—**Aggravation.**—(*Morning*), Weakness of eyes.—(*Afternoon and evening*), The symptoms.—(*Motion*), Pain in frontal eminences.—(*Walking*), Tearing pain in brain; pain in frontal eminences.

URANIUM NITRICUM.

Uranium nitrate.

Preparation. Dilutions of a saturated aqueous solution.

Authorities. (E. T. Blake, M.B., Hahnemann Mat. Med., part 2, 1871.) 1, a young man, æt. twenty-five years, with weak skin action, feeble secondary digestion, tendency to intestinal blennorrhœa, with ascarides, inward piles, slight emphysema, occasional œdema of lower lids, took 1 drop 2d dec. dil. (first day), 2 drops (second day), 5 (sixth day), increasing by 1 drop each day till he took 19 drops on the twenty-fourth day, 20 drops (twenty-sixth day), 21 (twenty-eighth day), 22 (thirtieth day), 24 (thirty-seventh day), 30 (forty-first day), 40 (forty-second day), 50 (forty-third day), 60 (forty-fourth day), 70 (forty-fifth day), 80 (forty-sixth day), 90 (forty-seventh day), 100 (forty-eighth day), 110 (forty-ninth day), 5 drops

of sat. sol. (fiftieth day), 30 of same at 11.45 A.M. (fifty-first day), 60 at 11 P.M. (fifty-second day), solution containing $\frac{1}{4}$ ounce injected into rectum at 10.30 P.M. (fifty-ninth day); **2**, G. C., a man, æt. thirty-one years, health good during the past four years, before that time subject to neuralgia with occipital pains (from mental overwork), took 30x gtt. v every morning on rising for a fortnight, except on the ninth day; **2a**, same, subsequently took 6x gtt. v for fourteen days, omitted till twenty-third day, then took daily till thirty-first day. [D.] affixed to a symptom signifies that there is good ground for doubting whether it be the result of the drug.

Mind.—Ill-temper; he is cross with everybody (eleventh day).¹—Ill-humor (sixteenth day).¹—Cross and disagreeable, not feeling well all day (twenty-seventh day).^{2a}.

Head.—Vertigo twice, in the evening (tenth day).¹—Head heavy on waking (seventh day).¹—(Taken a violent cold from exposure to wet, etc.; headache; sore throat, which lasted four days, leaving me feeling well on the fifteenth day, with the exception of a slight cough, in the morning on rising, accompanied by expectoration, which affords relief), (after eleven days).^{2a}—Frontal headache (sixteenth [D.], twentieth, and twenty-first days).¹—Slight frontal headache (called up previous night), (fourth day).²—Dull aching in right temple (immediately, forty-ninth day).¹—[10.] Headache, left temple (fifth day).^{2a}—Some slight pain in head again, similar to my old neuralgia; the pain always used to be on the *right* side, at the posterior edge of temporal bone; now, this day, it lasted from 2 to 4 P.M., in the same spot, but on the *left*† side, followed by a dull aching (twenty-fifth day); awoke about 1 A.M. with pain in head again, similar to former attack, lasting one hour and preventing sleep; ill from pain during the day (twenty-sixth day).^{2a}—Headache in old place (right side), severe, till after dinner; came on gradually; soon relieved by food (twenty-eighth day).^{2a}—Aching at occipital protuberance (seventh day).¹—Occipital and frontal headache, in the evening (seventh day).¹—Woke with occipital headache (tenth day).¹.

Eye.—In evening, pain shooting from right orbit to the occipital protuberance (nineteenth day).¹—Slight pain over left eye (after five minutes, fifty first day); pain (after one hour, fifty-second day).¹—(Edema of lower lids worse than usual), (eleventh day).¹—Stye in left upper lid (seventh day).¹—[20.] Lids much swollen, in morning (forty-first day), [D.].¹.

Nose.—Small scab in right nostril, with soreness (fortieth day), [D.].¹—Dry coryza (seventh day).¹—Left nostril stuffed (seventh day).¹—Itching in nose (seventh day).¹—Nostrils sore (thirty-ninth day), [D.].¹.

Mouth.—Small painless ulcer, with one elevated side in buccal aspect of left cheek, opposite left anterior upper molar (thirteenth day); ulcer more tender, worse in evening (fourteenth day); inside of cheek very sore (fifteenth day); cheek better (sixteenth day).¹—Saliva highly acid (twenty-fifth day).¹.

Throat.—Hawking of very tenacious mucus (twenty-eighth day).¹—Contracted feeling in throat (fifty-third day).¹—[30.] Cutting feeling at back of fauces (eighteenth day), [D.].¹.

Stomach.—No appetite (eighth day).¹; (fifth day).^{2a}—Tasteless eructations (fifty-first day).¹—Eructations (fifty-third day).¹—Putrid eructa-

† The keynote of this drug appears to be "left clavus." Witness its recurrence in Proving I.

tion about 11 and 3 (twenty-eighth day),².—Excessive flatulency in stomach and bowels (twenty-fifth day), [D.],¹.—Fit of dyspepsia, flatus after food, acidity, pain from cardiac extremity of stomach to suprarenal region, relieved by movement, lasted all day, then gradually disappeared; bowels slightly moved; paler claylike fæces. (Query.—If from medicinal action, as I have had such attacks to a slight degree before),².—Return of epigastric pain as above, with occasional twisting-screwing feeling rather lower down, relieved by food (ninth day),².—A return of indigestion in the afternoon, about a quarter of an hour before dinner, with gnawing sinking at cardiac end of stomach; not hungry nor faint (twenty-fourth day),².

Abdomen.—Flatus (fifth day).².—[40.] Borborygmi (twelfth day),¹.

Rectum and Anus.—Anal pruritus (sixteenth and twentieth days), [D.],¹.—Woke at 2 A.M. with urgent desire to evacuate rectum and bladder; borborygmi small; soft stool (twelfth day),¹.—Solution forcibly returned in twenty minutes, causing sharp colic and tenesmus, with raw feeling in rectum, followed during sleep by an unconscious seminal emission (fifty-ninth day),¹.

Stool.—Bowels moved twice (twelfth day),².—Slight constipation; fæces natural in color (fifth day); no action of bowels (sixth day); moved slightly (seventh day).².—Constipation (seventh day),¹.

Urinary Organs.—Sore pain in vesical region, in evening (twenty-fifth day),¹.—Slight burning in urethra (nineteenth day), [D.],¹.—Burning in urethra (twenty-fifth day),¹.—[50.] Urine healthy, sp. gr. 32 (first day); sp. gr. 20 (second day); trace of albumen, acid (eighth day); amber color, flocculent, very slightly acid, sp. gr. 25 (ninth day); sp. gr. 32 (tenth day); no albumen, no phosphates, nor lithates, sp. gr. 25 (eleventh day); woke at 2 A.M. with urgent desire to evacuate bladder and rectum (twelfth day); sp. gr. 35 (thirteenth day); 24 (fourteenth day); 40 (stale), (fifteenth day); 30 (sixteenth day); 22 (seventeenth day); ten micturitions in twenty-four hours, sp. gr. 25 (eighteenth day); 30 (nineteenth day); nine micturitions in twenty-four hours, sp. gr. 31 (twentieth day); small quantity of phosphates, sp. gr. 25 (twenty-second day); 27 (twenty-third day); no sugar (either by Moore or Fehling), sp. gr. 27 (twenty-fourth day); highly acid, 33 ounces in twenty-four hours, sp. gr. 34 (twenty-fifth day); desire to urinate again immediately after voiding the bladder, sp. gr. 30 (twenty-sixth day); fishy odor of urine, 24 ounces, sp. gr. 34 (twenty-seventh day); 33 ounces, sp. gr. 27 (twenty-eighth day); highly acid; sugar, albumen, phosphates, and lithates all absent; sp. gr. 24 (twenty-ninth day); 4 ounces, sp. gr. 25 (thirtieth day); very cloudy, deep amber color, slightly acid, no sugar, no salts, 30 ounces, sp. gr. 30 (thirty-first day); slightly acid, 31 ounces, sp. gr. 28 (thirty-second day); no albumen, much mucus, 24 ounces, sp. gr. 35 (thirty-third day); sp. gr. 38 (thirty-fourth day); 28 ounces, sp. gr. 31 (thirty-fifth day); 31 ounces, sp. gr. 30 (thirty-sixth day); 29 ounces, sp. gr. 25 (thirty-seventh day); acid, 22 ounces, sp. gr. 24 (thirty-eighth day); 24 ounces, sp. gr. 25 (thirty-ninth day); sp. gr. 32 (fortieth day); sp. gr. 27 (forty-first day); 43 ounces, sp. gr. 27 (forty-second day); 50 ounces, sp. gr. 25 (forty-third day); copious deposit of phosphates (having read all night), 42.5 ounces, sp. gr. 23 (forty-fourth day); phosphates less, 25 ounces, sp. gr. 26 (forty-fifth day); 33 ounces, sp. gr. 28 (forty-sixth day); 39 ounces, sp. gr. 27 (forty-seventh day); 26 ounces, sp. gr. 30 (forty-eighth day); 26 ounces, sp. gr. 27 (forty-ninth day); acid, 36 ounces, sp. gr. 22 (fiftieth day); high-colored and turbid, more than usual chlorides, no lithates, 40 ounces, sp. gr. 32 (fifty-first day); 31 ounces, sp. gr. 25 (fifty-

second day); 1.45 A.M., micturated for the second time since 11 P.M. yesterday; 2.30 A.M., micturated for the third time; 8.30 A.M., micturated for the fourth time; 22 ounces since 11 P.M. yesterday; 10.30 A.M., micturated for the tenth time; 6.30 P.M., micturated for the eleventh time; 8.30 P.M., micturated for the twelfth time in twenty-one hours and a half; 31 ounces, sp. gr. 14 (fifty-third day); sp. gr. 32 (fifty-fourth day); 30 (fifty-fifth day); 27 (fifty-sixth day); chlorides and phosphates plentiful, no lithates, sp. gr. 27 (fifty-ninth day); 6 A.M., 20 ounces have been passed since 10.30 last night; copious chlorides, less phosphates, sp. gr. 1015; 5 P.M. and 9.30 P.M., sp. gr. 30 (sixtieth day). Normal average of sp. gr. 1026, whilst taking drug 1028; normal maximum 1032, whilst taking drug 1038. Normal average of quantity 29 ounces, whilst taking drug 32 ounces; normal maximum 37 ounces, whilst taking drug 50 ounces; normal minimum 24 ounces, whilst taking drug 24 ounces.¹—Urine passed on rising, clear amber tint, quantity about half a pint; on standing till night, it deposits no sediment; acid to test-paper in the morning, less so at night; no abnormal amount of lithates nor of any other deposit; not the slightest trace of sugar, either with Fehling's or with Trommer's test; 5 P.M., one hour after dinner, sp. gr. 1032; a slight sediment, in the evening, of bladder epithelium (had been riding on horseback for an hour and a half before dinner); 10 P.M., sp. gr. 1026; pale yellow, about 14 ounces; no deposit the next night (fifteen days before the proving); *urina sanguinis*, sp. gr. 1019; higher color; slight microscopic deposit of urate of ammonia (twelve days before proving); taken cold slightly; headache, with nasal catarrh, dry skin, rigors (Ars. 3d taken); urine increased in quantity, but seldom passing more than 30 to 35 ounces a day, and, as a rule, only at the following periods: on rising, at stool, about 11 A.M., and at bedtime; this rule is disturbed by ingestion of wine or spirits, which, however, are rarely taken; passed 45 ounces, higher in color; morning urine, sp. gr. 1018; more acid; uric acid crystals and urate of ammonia increased at night; after dinner slightly acid (unusual); sp. gr. 1026, paler; three times after till 11.30 P.M.; lighter color; sp. gr. 1016; acid; a little more mucus and lithic acid than usual; no sugar nor pus (eight days before proving); cold nearly gone; urine more natural in every way (five days before); *urina sanguinis*, sp. gr. 1021, healthy color; no abnormal deposit; *urina chyli*, very slightly alkaline (day before proving); morning urine, sp. gr. 1025, higher color, 36 ounces in all; common sp. gr. 1023; no trace of sugar by two tests; no change with acids nor with liq. potass.; no abnormal mucus nor epithelium, etc. (one day before proving); pale, natural, as on the previous day; amount in twenty-four hours 38 ounces, sp. gr. 1024 (first day); 32 ounces, sp. gr. 1026 (second day); 30 ounces, sp. gr. 1028 (third day); high-colored, rather more acid, 30 ounces, sp. gr. 1028 (fourth day); 34 ounces, sp. gr. 1025 (fifth day); 32 ounces, sp. gr. 1028 (sixth day); sp. gr. 1027 (seventh day); paler; no sugar, mucus, nor pus; 39 ounces, sp. gr. 1023 (eighth day); 37 ounces, sp. gr. 1024 (ninth day); having ridden fourteen miles before dinner, slightly more mucus; 37 ounces, sp. gr. 1026 (tenth day); 37 ounces, sp. gr. 1025 (eleventh day); higher colored, 37 ounces, sp. gr. 1025 (twelfth day); higher, 30 ounces (warmer day, more perspiration), sp. gr. 1020 (thirteenth day); paler, 36 ounces, sp. gr. 1022 (fourteenth day); examined urine of yesterday: healthy in color; very slight cloud near the bottom of the glass; a few scattered urate of soda crystals under $\frac{1}{4}$ -inch lens; here and there a dumb-bell, but very indistinct, and this in only two specimens out of five (fifteenth day); at end of three days

examined urine of previous days, sp. gr. 1028, some bile in it, very unusual (nineteenth day); urine natural (twentieth and twenty-first days),².—Urine high-colored; a few lithates on standing; amount in twenty-four hours 36 ounces; sp. gr. 1026 (second day); 32 ounces, sp. gr. 1024 (third day); evening, urine cloudy; more mucus than usual; here and there a cast ($\frac{1}{4}$ -inch glass); uric acid crystals (uncertain pus or blood-cells in two specimens out of five); 35 ounces, sp. gr. 1026 (fifth day); high, 32 ounces, sp. gr. 1024 (sixth day); paler, 36 ounces, sp. gr. 1024 (seventh day); high, 28 ounces, sp. gr. 1020 (eighth day); normal, with exception of a slight increase of mucus, perhaps from a cold, which seems to be hanging about me; 34 ounces, sp. gr. 1025 (ninth day); 38 ounces, sp. gr. 1026 (tenth day); healthy; increase of lithates (sixteenth day); normal (twentieth and twenty-second days); 30 ounces, sp. gr. 1021 (twenty-third day); deposits a thick mucous sediment, acid in passing, soon becoming alkaline and offensive, containing a large quantity of uric acid crystals and lithate of ammonia, with pavement epithelium; no sugar or albumen; 30 ounces, sp. gr. 1018 (twenty-fourth day); high, much like above, 34 ounces, sp. gr. 1020 (twenty-fifth day); high, 36 ounces, sp. gr. 1024 (twenty-sixth day); high, 32 ounces, sp. gr. 1020 (twenty-seventh day); high; thick mucopurulent-looking sediment after standing all night; deposit consists of urates and mucus; no pus-corpuscles; phosphates more abundant than usual; no glycosuria; 34 ounces, sp. gr. 1021 (twenty-eighth day); paler, 38 ounces, sp. gr. 1025 (twenty-ninth day); pale, 38 ounces, sp. gr. 1025 (thirtieth day); mucopurulent appearance on standing; this material dissolves on boiling; phosphates more abundant; no albumen nor sugar by either test (thirty-second day),^{2a}.—Normal average of sp. gr. of urine 1023, whilst taking drug 1028; normal maximum 1032, whilst taking drug 1028. Normal average quantity in twenty-four hours 35 ounces, whilst taking drug 35 ounces; normal maximum 45 ounces, whilst taking drug 39 ounces; normal minimum 14 ounces, whilst taking drug 28 ounces,^{2 2a}.

Sexual Organs.—Unconscious seminal emission during sleep (fifty-ninth day),¹.

Chest.—Radiating pain from left side of ensiform cartilage, coming and going for last two days, aggravated by fasting (fifth day),^{2a}.

Pulse.—Pulse, lying, 69; standing, 74 (forty-eighth day),¹.

Back.—Pain at lower angle of left scapula, aggravated by taking a deep inspiration (forty-second day), [D.],¹.—Stiffness in loins (eleventh day),¹.

Generalities.—General languor (seventh day),¹.—[60.] Languid (twenty-third day),¹.—Extreme languor on rising from bed (twenty-seventh day),¹.—Feeling as if taken cold (no exposure), (fifth day),^{2a}.—Feeling of cold from exposure (eighth day),^{2a}.

Sleep.—Slight restlessness one or two nights (due probably to anticipation of being called out), (fifteenth day),².—Very restless at night, with shivering and heat (twenty-fourth day),^{2a}.

UREA.

Authorities. 1, G. F. Collier, M.D., *Lancet*, 1845 (2), p. 503, a man suffering from an eruption drank, in the morning, the urine he had passed the night before, for nine days; 2, Prof. Mauthner, *Journ. de Kinderkrankheiten*, 22, 1854, p. 1, experiments with urea in cases of dropsy.

Face very much swollen,¹.—Anasarca generally more prominent in the upper than in the lower parts of the body,¹.—Fluid in the abdomen and in the parietes of chest and belly, swelling, however, greatest in the upper parts,¹.—Urine scanty, thick, deep brown, and very offensive,¹.—Heaviness of the head, increased on stooping, and his own words are, that he feels too heavy for work, having neither his usual life nor warmth in him,¹.—Little thirst,¹.—Pulse under 90,¹.—Countenance pale; expression heavy and vague,¹.—He walks with a stick, because, he says, he feels the want of support,¹.—[10.] Loses his breath if he walks quick, and is obliged to stop,¹.—Profuse diuresis, with rapid diminution of the dropsy. Case of a boy, æt. seven years, suffering from dropsy: diminished urine, passed frequently; albuminuria; bloody urine; abdomen twenty-one inches round; scrotum, feet, and back œdematous; heart's action irregular, intermittent, 68, with sighing; attacked with violent convulsions. Took two grains of *Nitrate of urea* in three doses, at intervals of two hours. The urine became as clear as water; the albumen diminished; the dropsy diminished. On the second day the albuminuria disappeared, and the patient was perfectly well without any other medicine. Case of a girl, six years old, who was delirious, had nosebleed; urine brown, very albuminous; œdema of the pudenda; dropsy of the abdomen; pulse small and slow, 88; attacks of suffocation. Gave *Urea* as before. The urine increased, the swelling disappeared, and after ten days there was no longer any trace of albumen in the urine, and the child recovered perfectly,².

URTICA CRENULATA.

Urtica crenulata.

Natural order, Urticacæ.

A native of India.

Authorities. 1, G. G. Sigmond, M.D., *Lancet*, 1836-7 (2), p. 889, Leschenhault de la Tour, while in the botanic gardens, slightly touched one of the leaves with the first three fingers of his left hand; 2, similar effects on another persop.

At the time he only perceived a slight pricking, to which he paid no attention. This was at 7 A.M. The pain continued to increase. In an hour it had become intolerable; it seemed as if some one was rubbing his fingers with a hot iron; nevertheless, there was no remarkable appearance, neither swelling, nor pustule, nor inflammation. The pain rapidly spread along the arm as far as the armpit. He was then seized with frequent sneezing, and a copious running at the nose, as if he had caught a violent cold in the head. About noon he experienced a painful contraction of the back of the jaws, which made him fear an attack of lockjaw. He then went to bed, hoping that repose would alleviate his sufferings, but it did not; on the contrary, it continued nearly the whole of the following night, but he lost the contraction of the jaws about seven in the evening. The next morning the pain began to leave him, and he fell asleep. He continued to suffer for two days, and the pain returned in full force when he put his hand into water. He did not finally get rid of the pain for nine days,¹.—Pain as if boiling water was poured over him,².

URTICA GIGAS.

*Urtica gigas.**Natural order, Urticaceæ.*

The stinging tree of North Australia.

Authority. Cassell's Illustrated Travels (New Remedies, vol. 4, 1875, p. 353), effects of touching the leaf.

It causes most acute pain, which is felt for months afterwards, a dull gnawing pain, accompanied by a burning sensation, particularly in the shoulder and under the arm, where small lumps often arise. Even when the sting has quite died away, the unwary bushman is forcibly reminded of his indiscretion each time that the affected part is brought into contact with water. I have never known a case of its being fatal to human beings, but I have seen people subjected by it to great suffering, notably a scientific gentleman, who plucked off a branch and carried it some distance as a curiosity, wondering the while what caused the pain and numbness in his arm.

URTICA URENS.

*Urtica urens, L.**Natural order, Urticaceæ.**Common name, Nettle.**Preparation, Tincture of the plant.*

Authorities. 1. Dr. Fiard, Communication to Acad. de Med., Paris (A. H. Z., 8, 81), a woman, suffering from leucorrhœa and cramp in the stomach, took two cupfuls of a hot infusion of 2 ounces of the herb; 2, Dr. C. Neidhard, Hale's New Remedies, John Redman Coxe, Jr., M.D., took 12 drops $\frac{1}{10}$ th at 7 A.M. and 3 and 9 P.M. (first and second days), 15 at 7 A.M. and 2 and 10 P.M. (third day), 20 at 7 A.M. and 4 and 11 P.M. (fourth day); 3, same, A. R. Shaw, M.D., took 10 drops 1st dec. dil. at 8 A.M. and 2 and 10 P.M. for seven days; 4, Racine Journal (Amer. Hom. Obs., vol. 8, 1871, p. 522), a boy was stung.

Head.—All day a fulness of head and giddiness, like a rush of blood to the head (eighth day),³.—Fulness of head; sensation of rush of blood and dulness (twentieth day),³.—A dull aching pain in the head, lasting about an hour, with stitches in the region of the spleen (eighth day),³.—During the day a slight pressing in head, especially over the eyes (seventh day),³.—Dull aching pain in right sinciput and right side of face, extending to malar bone (fifth day),³.—Pain in right side of sinciput (fifth day),².—Pain in right parietal bone, stinging pain, compelling me to rub and press it (fourth day),².—Dull aching pain in occiput and over the eyes (ninth day),³.

Eye.—Pain in right eye (fourth and fifth days),².—[10.] At 3 P.M., pressing pain in left eye (third day),³.—Eyes feel weak and sore (sixth day),³.—During the day and evening a pressing pain over the eyes (sixth day),³.—A pressing pain over right eye and in the eyeball (fourth day),³.—Pain in eyeballs, as from a blow, with a feeling as if there were sand in the eyes (ninth day),³.

Face.—At 9 P.M. a neuralgic pain in the right face and forehead (sixth day),³.

Throat.—Considerable burning in throat, with frequent hawking up

of frothy mucus (second day),².—Burning in the throat for a short time (fourth day),³.—The throat burns and causes cough (fifth day),².

Stomach.—Nausea for a short time (fourth day),³.

Abdomen.—[20.] At 10 P.M. a pain in left hypochondriac region (fourth day),³.—Stitches in the region of the spleen, with the headache (eighth day),⁴.—Much pain over the whole abdomen, continued a week (twenty-ninth day),³.—Soreness over the abdomen, with the heat (fourth day),³.—At 10 A.M., a sensation of soreness in the bowels while lying down, and on pressure, a sound as if they were full of water (fifth day),³.

Rectum and Anus.—At stool, during and after the passage, had a sensation of burning in the anus, a raw burning, also a small hæmorrhoidal tumor, during the afternoon and evening, itching and burning, at times quite severe (second day),³.

Stool.—No stool, in the morning; at 2 P.M. a small dysenteric stool, a greenish-brown slime, with urging and tenesmus, but no itching or burning (third day). A small stool, with much straining; have been constipated for several days, very unusual (sixth day). Dysentery; frequent urging to stool; small painful stools; mucus mixed with white matter, like the boiled white of eggs, at times a little blood (twenty-ninth day). During the proving was constipated; no stool for two or three days, very unusual.¹.—No stool (third and fourth days), a circumstance remarkably unusual. None (fifth day). No stool; took Nux vom. 3d in six hours a stool, natural, followed in four hours by several dysenteric stools of a whitish slime, with pain around the umbilicus (sixth day). Though I am very regular in my stools, yet, for five days after the sixth, I had from two to four stools per diem, with pains of a coliclike nature and tenesmus; stools were white and yellow, with a slimy mucus intermixed,².

Respiratory Organs.—Not much expectoration, and what there is is frothy (fifth day),².

Chest.—At times, during the day, a soreness in right side of chest (fifth day),³.—[30.] A sore feeling, as from a blow, in the left side of the chest (eighth day),³.

Pulse.—Pulse accelerated by 6 beats (fourth day),².

Superior Extremities.—Pain in right deltoid muscle, slight (second day); pain increased, very painful at 9 P.M.; could not put on my coat without assistance (third day),⁴.—Pain in both arms, right the worst, and pain in both ankles, of a rheumatic nature (fifth day); pain in the arms continued until the fourteenth day,⁴.—At 7 P.M. a cramplike pain in right arm, in the deltoid muscles; it feels sore to touch, and feels worse on rotating the arm inward; this pain continued the whole evening; the left arm felt slightly rheumatic (third day). The pain in the right arm is increased by lying on it; the pain on moving it is very severe, a kind of sharp stitch darting through the arm; pain in arm very severe all day, extending all over the whole of the front humerus, and at times a pain in left arm, of a similar but lighter character; the muscles in right arm feel very sore, as if bruised; cannot stretch the right arm from severity of pain, and am unable to raise it (fourth day). Pain in right arm all day (fifth day). Pain in right arm gone (sixth day). A slight pain in both arms, with a rheumatic stiffness and pain in right wrist (seventh day). During the day a rheumatic pain in right wrist, slight, and not long-lasting (ninth day). Rheumatic pain in arm, wrist, and fingers of left side (eleventh day),³.

Inferior Extremities.—There is a stiff kind of soreness on inside of left knee-joint (fourth day),⁴.

Generalities.—Three years ago a boy had his feet and legs stung, and every year since then, at about the season of the year he was poisoned, he is taken sick, the same as when first poisoned².

Skin.—**The skin of the face, arms, shoulders, and chest was affected with extremely distressing burning heat, with formication, numbness, and violent itching.* The lips, nose, and ears, were swollen, and the lids swollen and oedematous, so that they could scarcely be opened. After awhile all the upper parts of the body, as far down as the navel, were frightfully swollen, pale, and oedematous rather than inflamed. A large number of small transparent blisters, filled with serum and looking like sudamina, developed and became confluent; on account of these the skin assumed a peculiar wrinkled appearance. There was no other remarkable disturbance either of circulation or respiration. The patient complained neither of headache nor of sensitiveness of the stomach and abdomen. The look of the patient was mon-trous, the lids completely closed, forming transparent, here and there bluish swellings as large as hen's eggs. The upper lip, nose, and both ears were frightfully swollen. On the third day the face became free, but the chest and arm remained affected with an eruption, which itched so violently that the patient scratched off the blisters, which exuded a large amount of serum. The woman, who had had no children for three years and a half, and had nursed none of her children, *had at first excessive swelling of the breasts, which discharged at first serum, afterwards perfect milk: a very copious secretion of milk lasted for eight days.* The secretion of urine was at first suppressed, and in spite of all diuretics and other remedies, not a single drop was secreted for eight days. During the whole illness there was a constant distressing itching. On the sixth day everything disappeared, with desquamation,¹—**Itching swellings all over the fingers and hands* (fourth day); a large number of bumps on fingers and hands, itching at times very severely, much resembling "bold hives"† (fifth day); the "hives" continued until the fourteenth day,²—Before taking the medicine on the second day, had itching "bold hives" on the left hand, which vanished in a few hours. At 10 p.m., a number of small lumps and red spots on the hands, and fever blisters on the lips, itching a good deal (seventh day). Many "hives" on hands, itching slightly, also a number of red blotches on hands (twentieth day). Many blotches on hands, itching a great deal (twenty-third to twenty-eighth day). A number of blotches still on my hands, but they do not itch (forty-second day),³.

Sleep.—[40.] While reading feel drowsy (sixth day),³.

Fever.—On getting into bed felt a heat all over the body, with soreness over the abdomen (fourth day),³.

USTILAGO.

Ustilago maidis, Corda.

Natural order, Fungi.

Common name, Corn smut.

Preparation, Triturations.

Authorities. 1, Dr. Roullin, Memoir to Royal Acad. of Sci., France (Bost. Med. and Surg. Journ., vol. ii, 1830, p. 814), effects when taken into the stomach for a period of time. (2 to 6, W. H. Burt, M.D., Monograph

† A common name for a species of *Urticaria*, generally *Urticaria nodosum*.

on *Ustilago Maidis*.) **2**, Miss K. O., æt. thirty-two, took 2d dec. trit. three weeks, and then 1st dec. three weeks, in 2-grain doses three times a day, for a uterine tumor of enormous size, which was reduced one-third in size and was greatly relieved of its sensitiveness, greatest effects on skin; **3**, W. H. Burt, in perfect health, took 20 grains 2d dec. trit. at 4 P.M. (first day), 20 grains at 12 M. (second and third days); **4**, same, took 20 grains 2d dec. at 11 A.M. (first day), 40 grains at 6 A.M., an hour before eating (second day), 40 grains at 7 A.M. (third day), 50 at 7 A.M. (fourth day); **5**, same, took 5 grains crude untritured drug at 7 A.M. (first day), 10 grains (second day), 15 grains at 7 A.M. (third day); **6**, same, subsequently feeling very well, but still having complete prostration of the animal system, took 20 grains crude drug at 12 M. (first day), same at 7 A.M. (sixth day), 10 grains in the morning (seventh and eighth days). (7 to 13, T. S. Hoyne, M.D., Trans. Am. Ins. Hom., 1872, p. 493 (six students report that they obtained no symptoms from the drug)). **7**, E. H. Pratt, took a powder of 1 grain 2d trit. at 10 P.M.; **8**, H. M. B., took same at 12.30 P.M.; **9**, Miss M. S. Stearns, took same; **10**, S. R. Kridler, took same at 5 P.M.; **11**, C. W. Brown, took same at 10 P.M.; **12**, R. H. Paine, took same in a spoonful of water at 11 P.M., probably caught cold from exposure on the third day; **13**, same, having had no symptoms for a week, took 1 grain 2d trit. at night.

Mind.—Much depressed in spirits this afternoon (third day),⁴.—Have felt irritable and disinclined to talk all day; could not take hold of anything with energy; had nothing particular to complain of (fourth day),¹².—For three days have felt irritable; almost everything goes wrong (tenth day),¹².

Head.—**Vertigo**. Frequent attacks of vertigo; everything before the eye whirls, sometimes appearing double, and at times myriads of white specks come before the eyes and blot out everything else (second day); occasional attacks of vertigo and internal heat came on for three or four days till the end of twelve days.⁷.—**General Head**. Dulness of the head (after two days),⁹.—Headache before rising, dull, from dry cold in head; it disappeared after a bath and eating breakfast (third day),¹².—Dull headache all the morning (third day),⁵; at 7 A.M. (seventh day),⁶.—Head feels heavy (fourth day),¹².—In the morning head felt stuffed; felt better after eating breakfast (fourth day),¹².—[**10**.] All the morning have had a feeling of fulness of the head, with dull, pressive, frontal headache; dull frontal headache all day, with aching distress in the eyeballs (second day),⁴.—Head aches most violently at noon; have been very languid to-day, with a bursting frontal headache, 9 P.M. (third day),⁵.—Slight headache (fourth day),⁴; (sixth day),⁶.—**Forehead**. Some headache, mostly frontal, this evening (second day),¹³.—Frontal headache (after half an hour); has continued ever since, with distress in the epigastrium (after four hours); head aches severely, aggravated by walking (after seven hours),⁴.—Dull frontal headache all the forenoon, with smarting of the eyes (third day),⁴.—Dull frontal headache, in the morning (third day),⁵; (seventh day),⁶.—Dull, heavy, frontal headache, while walking in the open air, relieved on staying in the warm room, not from hunger (seventh day),¹².—Frontal headache, with erections (after three hours and a half),⁸.—Severe neuralgic pains in the forehead, hands, and feet (first day),⁶.—[**20**.] Sharp pains in the forehead (after one hour),⁶.—**External Head**. Loss of hair,¹.

Eye.—Occasional slight spasms of the eyes, when everything vanishes from sight and the head seems to whirl (fourth day),⁷.—Frequent attacks

of twitching of the eyes, and my eyes appeared to look (revolve) in circles and dart from one object to another in quick succession (third day),¹¹.—Eyes weak (second day),⁷.—Aching of the eyes,⁶ with profuse secretion of tears (second day),⁴.—Queer feeling in the eyes, smarting or inflamed feeling (after two days),⁹.—Eyes feel hot on closing the lids (fourth day),⁷.—Smarting of the eyes, with the dull frontal headache (third day),⁴.—Eye-lids agglutinated together, in the morning (seventh day),⁶.—[30.] Eyes weak and water much out of doors (seventh day); eyes water profusely in the open air (ninth day),⁶.—Eyes water much in the open air (sixth day),⁶.—Pain in the right eyeball, with the distress in the stomach (first day),³.—Aching distress in the eyeballs, with the headache (second day),⁴.—Spots dancing to and fro before the eyes,⁶.

Nose.—A small boil in the right nostril (sixteenth day),⁵.—Thick mucus is discharged from the nose all the forenoon (third day),¹².—Profuse discharge of thick mucus from the nose, lasting an hour or two (fourth day),¹².—Thick mucous discharge from the nose, not profuse (fifth day),¹².—Dryness of the nostrils, with the prickling sensation in the tongue (second day),⁴.—[40.] All the forenoon had dryness of the nostrils, with a dry feeling in the whole skin (third day),³.

Face.—Sudden pallor coming on while sitting and in the evening,¹⁰.—Face has a dingy-yellow look, more so than natural (fifth day),¹².

Mouth.—**Teeth.** Sometimes looseness of teeth,¹.—Toothache all day in upper first and second molars; they are decayed and have ached before (sixth day); toothache to-day the same as yesterday (seventh day),⁵.

Tongue. Tongue coated in the morning,¹⁰.—A prickling sensation in the tongue, and a feeling as if something were under the roots of the tongue pressing it upwards, with dryness of the nostrils (second day),⁴.—**Saliva.** Profuse secretion of thin bitter saliva (third day); saliva profuse (fourth day),⁷.—Bitter saliva was secreted in abundance (third day),¹¹.—**Taste.** Slimy taste, with burning distress in the stomach (second day),⁴.—[50.] Slimy coppery taste in the mouth (fifth day); slimy taste in the mouth for a number of days after the proving,⁴.—Slimy coppery taste in the mouth, in the morning (third day); slimy taste (fifth and sixth days); for a week had slimy taste in the mouth, with a relaxed state of the sexual organs (after seven days),⁵.—Coppery taste in the mouth, in the morning (sixth day); slimy coppery taste, in the morning (seventh and eighth days); slimy taste (twelfth day),⁶.

Throat.—During the night was troubled with mucus in the posterior nares (third day),¹².—Throat sore and dry towards morning; upper part of throat felt filled up; pharynx and uvula reddened; this passed off in the morning, but the head felt stuffed (third day),¹².—In a short time felt a sharp lancinating pain in the right tonsil (the fauces were somewhat inflamed when the medicine was taken), (first day); fauces hotter and more sensitive to motion than last night; throat still sore (second day); throat worse, very painful (sharp lancinating pains), (third day); throat still painful (fourth day),⁷.—Left tonsil enlarged and much congested, of a dark-reddish color, right one also quite painful on swallowing, at 2 P.M.; left tonsil much enlarged and painful, at 9 P.M. (seventh day); left tonsil much congested, extending to the ear along the Eustachian tube, which produces constant dull pain in the ear, in the morning (eighth day); tonsils more painful than yesterday (ninth day); left tonsil still congested but not so painful (tenth day); left still congested but not painful (eleventh day),⁶.—Dryness of the fauces with difficulty in swallowing, feeling as if

there were a lump behind the larynx (after half an hour); dryness of the fauces, with a burning distress in the stomach (after one hour); frequent efforts to swallow, with a feeling in the fauces as if something had lodged there (after four hours); irritation of the fauces, with a feeling as if there were a lump in the larynx when swallowing (sixth day); fauces congested and irritated (seventh day),⁶.—Dryness of the fauces, with a burning dryness in the stomach (first day),³.—Rough feeling in the fauces (first day),⁵.—[60.] Burning in the œsophagus (soon),¹¹.—A burning sensation along the whole length of the œsophagus, especially at the cardiac orifice of the stomach; heartburn, morning, continued all day (second day),⁷.†

Stomach.—Appetite and Thirst. Very hungry (eighth day); craving appetite (ninth day),⁶.—Appetite good; craving for hearty food (fifth day),¹².—Towards night felt a strong desire for acid food, and ate an apple, which stopped this craving; at the same time had a craving for hearty food, which left on eating the apple (fourth day),¹².—Poor appetite (fifth day),⁵.—Very thirsty (eighth day); had to get up in the night to drink, was so thirsty (eighth night),⁶.—**Eruclations.** Eruclations of ingesta strongly acid, with constant distress in the stomach, at 10 A.M.; frequent eruclations of sour fluid, at 10.30 A.M. (second day),⁴.—Eruclations of sour fluid from the stomach, with distress in the same region; afterwards eruclations of sour food (third day),⁴.—**Stomach.** Distress in the stomach (second day),³.—[70.] Distress in the epigastrium, with the headache (first day),⁴.—Constant distress in the stomach; frequent pains in the stomach, all the afternoon (fourth day),⁴.—Constant distress in the stomach all the forenoon, with pain in the right eyeball; have had hard pains in the stomach for the last two hours (after seven hours); severe distress this afternoon, eating supper relieves it (second day),⁵.—Constant burning distress in the stomach, with slimy taste (second day),⁴.—Pain in the cardiac region of a burning character,¹⁰.—Dull pains in the epigastrium, with constant severe drawing pains in the joints of the fingers (third day),³.—Frequent spells of pain in the stomach and small intestines, with dull distress in the right hypochondrium (sixth day),⁶.—Frequent cutting pains in the stomach, with constant distress in the same region; had the constant severe distress until I ate supper, which relieved it (third day),⁴.—Full inspiration causes a dull pain in the stomach (second day),⁴.—Burning dryness in the stomach, with dryness of the fauces (first day),³.

Abdomen.—Hypochondria. [80.] Drawing pains in the right hypochondrium all day (sixth day),⁵.—A great deal of pain in the right lobe of the liver (seventh day),⁵.—**Umbilicus.** Have suffered constantly with dull distress in the right hypochondrium and umbilicus (eighth day),⁶.—For the last two hours have had fine, sharp, cutting pains in the umbilical and hypogastric regions, lasting about three minutes at a time, and coming on every ten and fifteen minutes (after four hours); the colicky pains lasted until 8 P.M., when they were relieved by a constipated stool (the first to-day), (after eight hours); since have had constant grumbling pains in the whole of the bowels, with severe pains in the testicles (after ten hours),⁶.—Dull pains in the umbilicus and right liver (seventh day),⁶.—Frequent pains in the umbilicus (eighth day),⁶.—**General Abdomen.** Pain in the abdomen for two or three days, a very unusual symptom (after two days),⁹.—

† Kali bich. always gives me the same symptoms, but I had not taken it for two weeks previous.

Occasional pains in the bowels (sixth day),⁶.—Pain in left inguinal region, while walking,¹⁰.

Stool.—Slight diarrhœa, with light-colored stools (second day),⁸.—[90.] Constipated stool, at 8 P.M. (the first to-day), (first day); natural stool, preceded by dull pains in the umbilicus (seventh day); stool at 4 A.M., inclined to be loose, with pain and rumbling in the bowels (ninth day); no stool (tenth day),⁶.—Natural stool (third day); no stool (fourth day); mushy stool before breakfast (fifth day),⁴.—Natural stool, at 4 A.M. (third day),³.—Natural stool (first day); rather soft stool (second day); dry, lumpy stool (third day); black, dry, lumpy stool (fifth day),⁵.—Bowels constipated this morning, a very unusual thing for me (third day); bowels have been constipated all the time (tenth day),¹².

Urinary Organs.—Great desire to urinate, the urine being of a lighter color than usual,¹⁰.—Flow of urine increased (fourth day),⁷.—Urine very red and scanty, diminished one-half (third day); urine diminished greatly to-day and high-colored (fifth day); urine increased (sixth day); increased and very clear (seventh day),⁵.—Urinated 30 ounces, acid (sixth day); urinated 24 ounces; acids have no effect upon it (seventh day); 23 ounces (eighth day); 26 ounces, high-colored (ninth day); 30 ounces, acid, high-colored (tenth day); 28 ounces, high-colored (eleventh day),⁶.

Sexual Organs.—**Male.** At 4 o'clock, erections while reading, with frontal headache,⁷.—[100.] Frequent erections during the day and night,¹⁰.—Relaxed state of the sexual organs, with a slimy taste in the mouth for a week (after seven days); sexual desire was depressed during the whole experiment,⁵.—Scrotum greatly relaxed, with a cold sweat upon it, in the morning (seventh and ninth days); still profound prostration of the sexual system, with the organs greatly relaxed (eleventh day); scrotum still greatly relaxed; sexual desire perfectly prostrated (fifteenth day); this prostration of the sexual system lasted a month after ceasing the proving,⁶.—With the pains in the bowels, constant severe pains in the testicles, more in the right one (after eight hours); 12 M., constant, severe, dull, aching pains in the testicles, sometimes the pains would be of a sharp neuralgic character; 5 P.M., my right testicle has constantly pained me nearly all day, the pain is of a dull, aching character, at times the distress would be in both testicles; 9 P.M. the dull, aching distress in my testicles has not ceased a moment, this evening (sixth day); 11 A.M., every few minutes have had severe pains in the testicles, lasting about five minutes at a time; the pains produced a faintish feeling; three times had hard paroxysms of pain in the testicles, this evening (seventh day); 5 P.M., have had spells of hard pains in the testicles; 9 P.M., slight pains in the testicles (eighth day),⁶.—**Female.** * (During these four months it produced a constant *aching distress* in the womb, referred by the patient to the mouth of the womb),⁷.

Respiratory Organs.—Raise a little mucus, of a thick, sticky nature, at nearly every cough (third day),¹².—Hacking, rough, and painful cough (fourth day),¹².—10 P.M., have had a cough, with thick mucous expectoration, all day, but am getting better of the cold (fourth day),¹².—A very little cough and expectoration (fifth day),¹².

Chest.—Feeling of oppression in the chest, along the median line,¹⁰.—[110.] In the evening the lungs were sore on coughing (third day),¹².—Heat and pressure in the chest (third day),¹¹.—For the last hour have had a constant aching, burning distress under and in the sternum, appears to be in the sternum and also in the stomach, accompanied with fine neuralgic pains in the same region; this is a prominent symptom (third day),³.—A

sharp tearing pain in left side, commencing at the top of the chest and passing down to the sixth or seventh rib, increased by breathing; was present for several minutes; it was rather spasmodic, and occurred about 3 P.M., while standing and reading (fourth day).¹³.—Awoke about 3 A.M. with a dull drawing pain in the left inframammary region, which disappeared on turning on the back from the right side (second day).¹².—Slight pain in left infraclavicular region, just before rising, this morning; passed off soon (second day); pain in left infraclavicular region (third day).¹³.

Heart.—Sudden flying pain from the heart to the stomach that arrested breathing, lasted but a moment (probably myalgic), (after four hours).⁶.

Back.—Pain in the back, which extends to the extreme point of the spine.—Dull backache (eighth day).⁶.—Dull pains in the small of the back (sixth day).⁶.—[120.] Dull pain in the lumbar region (sixth day).⁶.

Extremities.—Frequent rheumatic symptoms in the arms, fingers, and legs all day; these rheumatic symptoms lasted a week (after four days).³.

Superior Extremities.—Rheumatic pains in the muscles of the arms, hands, fingers, and small of the back, walking aggravates the pains in the back (fourth day); had a few rheumatic symptoms to-day (fifth day).⁴.—Every day, several times through the day, for the last week, have had a numb tingling sensation in the right hand and arm, that would last from a few minutes to an hour at a time (sixteenth day).⁵.—Severe rheumatic pains in the muscles of the right shoulder (third day); had pain in the right shoulder all night (third night).⁴.—Dull, aching pains in the shoulder-joints (second day).³.—Dull pains in the right elbow, worse on motion (third day).⁴.—Sharp, cutting pains in the metacarpal bone of the right hand and foot (after four hours).⁶.—Fine stitching pain along the metacarpal bone, right forefinger, every few seconds (second day).⁴.—All the afternoon had rheumatic drawing pains in the finger-joints, especially in the second joint of the right forefinger (second day).³.—[130.] Constant severe drawing pains in the joints of the fingers, with dull pains in the epigastrium (third day).³.

Generalities.—At noon to-day, after walking a mile or so, my hands and whole body trembled slightly. I was not fatigued. This passed off in a few minutes (third day).¹².—In the morning rose with a tired feeling (second day); awoke early and felt tired, yet could not rest (third day).⁷.—For last three days have felt dull, as if I had not slept enough (tenth day).¹².—Very languid (third day); languid (fifth day).⁵.—Very languid all day (fourth day); very languid for a number of days after the proving.⁴.—Very languid (sixth day); called up at 4 A.M., feeling excessively languid; great languor at 2 P.M. (seventh day).⁶.—Have had a number of faint spells, commencing in the epigastrium, with small pains in the hypochondrium and bowels (seventh day).⁶.—At 11 A.M., felt very much as if I was going to faint; felt oppressed for want of fresh air; this soon disappeared; was in the lecture-room, which was warm (second day).¹².—Symptoms of a slight cold (after two days).⁹.—[140.] Felt quite well to-day, though not so bright as usual (fifth day).¹².—No symptoms to speak of the first two days, or rather my health was better.⁹.

Skin.—On the skin it spent most of its power; the scalp and chest were most affected, but the skin of the whole body was more or less involved; the great centre of action was on the scalp; the whole scalp became one filthy mass of inflammation, two-thirds of the hair came out, and

what was left was completely matted together; a watery serum kept constantly oozing from the scalp, so great as to keep the hair wet all the time; the patient now cut her hair very short, and she then washed it thoroughly with castile soap daily, and applied a cerate of *Ris v.* to the whole scalp; took internally *Iris v.* and *Sulphur* for five weeks before the scalp became well; the eruption on the body resembled the eruption of *rubeola* perfectly, even in coming out, it first appeared on the neck and chest, and gradually extended to the feet; at no time was the eruption vesicular, but constantly of a deep red color, and about the size of a pin's head; the chest and joints were completely covered with this fine red eruption, the body not so thickly; at night the eruption itched most violently; by rubbing any part of the body in a few minutes it would break out with the eruption; this peculiarity lasted during the whole course of the eruption; on the neck and face it came out in patches like ringworm (*Herpes circinatus*), but not vesicular.²—Two small boils on the back of the neck (fifteenth day).⁶—Dry feeling in the whole skin, with the dryness of the nostrils (third day).³—Skin dry and hot (fourth day); skin feeling dry (fifth day).⁴—The whole skin feels congested (sixth day).⁶—Whole skin felt dry, as if I had taken cold (second night).³

Sleep.—Restless all night (second night).³—Restless at night, with fever.¹⁰—[150.] Night restless and had troubled dreams, an unusual occurrence with me (first night); sleep restless and dreamed considerable (second night); dreams when lying down in the daytime and at night (third day); difficulty in getting to sleep, and when I did unpleasant dreams haunted me continually (fourth night); have dreamed every night since taking the medicine, something unusual for me (fourteenth day).¹¹—Sleep troubled; tossed about much in bed, and had gloomy and disappointing dreams (first night); troubled dreams, with great restlessness (not natural) and internal heat (second night); in the morning awoke early and felt tired, yet could not rest (third day); restless sleep, full of gloomy dreams (third night); rested nearly as well as usual, though somewhat restless yet (fourth night).⁷—Slept well, but dreamed of the lectures (fourth night).¹²—Horrid dreams at night, although not usually followed by dullness of the head, in the morning, with queer feeling in the eyes, smarting or inflamed feeling (after two days).⁹—Troublesome dreams at night.¹⁰—Sexual dream, but no emission (first night); had a restless night; sexual dream, no emission (second night); sexual dream, no emission (fourth night); sexual dream (fifth night).⁵

Fever.—Heat over the entire body, at night; I threw off the bed-clothes during sleep, and on waking found myself exceedingly warm.¹⁰—Internal heat, especially in the eyes, which are inflamed and sensitive to light, and the eyeball is sore to touch (second day).⁷—Towards the middle of the day was seized with great internal heat (pulse normal) over the whole body, but especially in the eyes; in the afternoon, internal heat gone; at night, internal heat; this feeling of general heat seems to come and go at short intervals (two to four hours), (second day).⁷—General internal heat (third day); attacks of internal heat and vertigo, for twelve days.⁷—[160.] Skin feeling hot and dry (third day).⁴—Burning sensation of the face and scalp (third day).⁴

Conditions.—**Aggravation.**—(*Full inspiration*), Pain in the stomach.—(*Motion*), Pain in elbow.—(*Walking*), Pain in inguinal region; pain in back.

UVA-URSI.

Arctostaphylos Uva-ursi, Spreng.

Natural order, Ericaceæ.

Common name, Bearberry.

Preparation, Tincture or trituration of the dried leaves and fruit.

Authorities. 1 to 3 from Noack and Trinks. **1**, Hahnemann; **2**, Heberden, Comment.; **3**, Sauvages, Nosol.; (4 to 6 from John S. Mitchell's Essay on the Arbutus, Uva-Ursi, and Pyrola Umbellata, and Maculata of Linnæus, Philad., 1803); **4**, I took, at 11 A.M., 10 grains of the dried leaves reduced to powder; **4a**, same, at 10 A.M., took 15 grains of powder in water; **4b**, same, took 30 grains of powder in water, at 12 o'clock; **4c**, same, took 40 grains in same way, at 11 A.M.; **4d**, same took 8 grains resin, at 9.30 A.M.; **5**, Mr. Bartram took 10 grains gum, at 11.30 A.M.; **6**, B. S. Barton reports effects on a gouty patient, who is liable to be affected in a similar way by Peruvian bark.

Head.—Slight vertiginous affection of the head (after thirty minutes),^{4d}.—Slight headache continued till near the close of the experiment (after twenty minutes),^{4b}.—Slight headache (after twenty minutes),^{4d}.—A slight headache, which went off in the course of half an hour (after twenty-five minutes),^{4c}.

Face.—Flushing in the face (after twenty-five minutes),^{4c}; (after fifteen minutes),^{4b}; (after thirty minutes),⁵.

Urinary Organs.—Urinary troubles,¹.—Burning after the discharge of slimy urine,³.—Involuntary discharge of urine,¹.—Bloody urine,³.—[10.] Green urine,².

Chest.—Uneasy tightness, with a sensation of weight at the chest,⁶.

Pulse.—Pulse 69 (before the experiment); 70 (after five minutes); 69, and continued smaller through the experiment (after ten minutes); 70 (after fifteen and twenty minutes); 68 (after twenty-five minutes); 69 (after thirty minutes); 66 (after thirty-five minutes); 65 (after forty and forty-five minutes); 62 (after fifty minutes); 64 (after fifty-five minutes); 63 (after sixty minutes); 62 (after sixty-five minutes); 64 (after seventy minutes); 62 (after seventy-five and eighty minutes),⁴.—Pulse 78 (before the experiment); the same (after five minutes); 73 (after ten minutes); 75 (after fifteen and twenty minutes); 72 (after twenty-five minutes); 73 (after thirty minutes); 74 (after thirty-five minutes); 73 (after forty minutes); 72 (after forty-five, fifty, and fifty-five minutes); 74 (after sixty minutes); 73 (after sixty-five minutes); 72 (after seventy minutes); 73 (after seventy-five minutes); 69 (after eighty, eighty-five, and ninety minutes); 71 (after ninety-five minutes); 68 (after one hundred minutes); 72 (after one hundred and five minutes). In the forepart of the experiment, there was a small increase in the fulness of the pulse, which afterwards became smaller,⁴.—Pulse 66 (before the experiment); 69 (after five minutes); 72 (after ten minutes); 74, and fuller (after fifteen minutes); 69 (after twenty minutes); 68 (after twenty-five and thirty minutes); 67 (after thirty-five minutes); 67, and much reduced in force (after forty minutes); 63 (after forty-five and fifty minutes); 64 (after fifty-five minutes); 63, weak and flowing (after sixty minutes); 63 (after sixty-five minutes); 60 (after seventy and seventy-five minutes); 63 (after eighty minutes); 65, and fuller (after eighty-five minutes); 63 (after ninety minutes); 64 (after ninety-five minutes); 66 (after one hundred minutes),^{4b}.—

Pulse 73 (before the experiment); 78, and considerably fuller (after five minutes); 74, and much harder (after ten minutes); 73 (after fifteen minutes); 68 (after twenty and twenty-five minutes); 66 (after thirty minutes); 67 (after thirty-five minutes); 68 (after forty minutes); 65 (after forty-five minutes); 66 (after fifty minutes); 65 (after fifty-five minutes); 67 (after sixty minutes); 66 (after sixty-five minutes); 65 (after seventy minutes); 68 (after seventy-five minutes); 72 (after eighty and eighty-five minutes); 73 (after ninety minutes); 70 (after ninety and one hundred minutes); 72 (after one hundred and five minutes).³—Pulse 76 (before the experiment); 78 (after five minutes); 78, and not so full (after ten minutes); 74, irregular and small (after fifteen minutes); 72 (after twenty minutes); 70 (after twenty-five minutes); 76, and very small (after thirty minutes); 74 (after thirty-five minutes); 73 (after forty minutes); 71 (after forty-five minutes); 62, and much fuller (after fifty minutes); 68 (after fifty-five and sixty minutes); it remained at 68 for an hour afterwards.⁴—Pulse 73 (before the experiment); 77, and somewhat fuller (after five minutes); 75 (after ten minutes); 76 (after fifteen minutes); 73 (after twenty minutes); 75 (after twenty-five and thirty minutes); 74 (after thirty-five minutes); 77, weak and soft (after forty minutes); 78 (after forty-five minutes); 76 (after fifty and fifty-five minutes); 77 (after sixty minutes); 76 (after sixty-five minutes); 77, and much fuller (after seventy minutes); 78 (after seventy-five minutes); 76 (after one hundred minutes).⁵

VACCININUM.

The lymph from the "cow-pox."

Preparation, Triturations.

Authorities. 1, Schuklitsch, A. H. Z., 4, p. 12, vaccinated a child with the 4th dil.; 2, Richard Kanstätt, Yearbook, 1847 (A. H. Z., 45, p. 373), effects on children from sucking vaccine pustules in other children; 3, Le Normand, Hygea, 10, p. 68 (ibid.), a child at. ten months, took for eight days in succession some pellets of 12th dil.; 4, Dr. Hencke, A. H. Z., 45, 373, gave a child, at. eight months, a drop of lymph from a healthy vaccination, diluted with 100 drops distilled water, and well shaken; 5, W. R. Power, M.D., Philad. Journ. of Hom., vol. i, 1852-3, p. 493, had had small-pox by inoculation in infancy, and at the age of twenty had vaccinated himself, from which he had twenty or more vaccine pustules, fever, etc.; on July 12, while attending upon a severe case of small-pox, began taking 2 or 3 grains 3d dec. trit. of Vaccinin in the morning, the same an hour before or after dinner, and again on going to bed; 6, L. W. Berridge, Am. Journ. of Hom. Mat. Med., vol. viii (new ser. iv), p. 126, an unvaccinated baby took a dose of 1600 (Fiecke), twice afterwards was inoculated in the arm with 1600, on every occasion had the same eruption.

Mind.—Ill-humor with restless sleep (second day).¹

Head.—Slight frontal headache (sixth day); much increased (seventh, eighth, and ninth days).²

Mouth.—Dry mouth and tongue (fifth day); much increased (sixth, seventh, eighth, and ninth days).³

Stomach.—Appetite gone, and disgust to taste, smell, and appearance of food (ninth day).³

Heart and Pulse.—More activity of arterial action (ninth day).⁵

—More actual manifestation of febrile action of heart and arteries than on any of the preceding days (eighth day),⁵.

Back.—Backache (sixth day); much increased (seventh, eighth, and ninth days),⁵.

Extremities.—Slight but distinctly marked soreness of the lower extremities, as if heated or overexerted (sixth day); aching of the lower extremities, amounting to an almost unfitness to get about in the performance of my daily avocation, and which cannot be better described than by the appellation of a breakbone sensation, *i. e.*, my legs ached immoderately, and to the aching was conjoined a sensation as if the bones were undergoing the process of comminution (seventh day),⁵.

Generalities.—Restlessness,³.—[10.] A slight but definite feeling of general "malaise" (third day); increase of the feelings of yesterday (fourth day); oppressive increase (fifth day),⁵.—Some languor, lassitude, and restlessness (fifth day); much increased (sixth, seventh, eighth, and ninth days),⁵.

Skin.—A general eruption similar to cow-pox, from which other children were successfully vaccinated,².—Small pimples developed at the point of vaccination (ordinary vaccination, after six weeks, was unsuccessful),¹.—Red pimples or blotches on various parts, most evident when warm (after two or three days),⁶.—On the fourth day there developed on the face small bright-red pimples, which on the following day formed vesicles of a pearly look, with depressed tips, and surrounded by red areolæ; on the eighth day the child was very restless, screamed and cried, and would not be quiet, wished to be carried constantly; was sleepless, with febrile heat, rapid pulse, thirst, desire to nurse constantly without taking much; constipation, high-colored urine; the pocks were elastic, tense, hard, pearly; with inflamed redness and swelling of the rest of the face; on the tenth day the inflammation and swelling of the face disappeared, the child became quiet, and the fever diminished; on the forehead and nose the pocks became confluent, looked turbid, were filled with purulent liquid, and somewhat shrivelled; on the eleventh day the pustules burst and discharged a purulent matter, which formed yellowish-brown scabs, which afterwards became dark; these suppurated and exuded for a long time, gradually healed in about fourteen days; the whole course was like that of crusta lactea; the child was very well afterwards, but still had on the forehead and cheeks some small, very white spots without scars; subsequently repeated vaccinations at six months' intervals were ineffectual,⁴.—Small red pimples in various parts of the skin (subsequently repeated vaccination was ineffectual),³.—A tingling burning sensation in the skin, over the whole body, similar to the sensation of an eruption of fever blisters on the lips, nose, cheek, etc., the sensation being very and most intense in the skin of the forehead, and of the lower and anterior portion of the hairy scalp, which, on examination in a mirror, revealed the fact that those portions of the skin were "tinged with a scarlet blush, or efflorescence, precisely similar in appearance to that which I have always seen as the most immediate precursor and certain sign of an immediate variolous eruption" (ninth day),⁵.

Fever.—Fever, with heat, thirst, tossing about, crying, aversion to food (three to four days),¹.—Skin hot and dry (ninth day),⁵.

VALERIANA.

Valerian officinalis, Lini.

Natural order, Valerianaceæ.

Common names, Valerian; (G.), Baldrian.

Preparation, Tincture of the root.

Authorities. (1 to 16 from Stapf's Beiträge.) **1**, Hahnemann; **2**, Franz; **3**, Gross; **4**, Stapf; **5**, Wislicenus; **6**, Andrée, cases of epilepsy, p. 262; **7**, Carminati opusc. therap. 1, 227; **8**, Casp. Hoffm. Off. p., 583; **9**, Dodonaeus, Pempt., p. 262; **10**, Haller, Hist. Stirp. Helvet. Indig., p. 210; **11**, Hill on Valerian; **12**, Horstius, Pharmac. Cathol. f. CLX.; **13**, Junker, Therap. General. p. 111; **14**, Marchant, Mém. de l'Acad. des Sci. de Paris, 1705; **15**, Ray, Hist. Plant, vol. i, p. 388; **16**, Tissot, traité de Epilepsie, p. 309; (17 to 28, Jörg's Proverings, Materialien, etc., 1825); **17**, Engler took infusions of root, $\frac{1}{4}$ part of 3 drachms (first day), $\frac{1}{4}$ of 4 drachms (second day), $\frac{1}{4}$ of 5 drachms (third day), $\frac{1}{4}$ of 6 drachms (fifth day); **17 a**, same, took $\frac{1}{2}$ drachm of powder of root, afterwards 1, $1\frac{1}{2}$, and 2 drachms; **18**, Güntz, took an infusion of 2 scruples (first day), of 1 drachm (second day), of $1\frac{1}{2}$ drachm (third day), of 2 drachms (fourth and fifth days), afterwards of 4 ounces; **18 a**, same, took 10 drachms of an infusion of the strength of the root; **18 b**, same, $\frac{1}{2}$ and $1\frac{1}{2}$ drachms of powder; **19**, Haase, took various doses of infusions; **19 a**, same, took $\frac{1}{2}$, 1, $1\frac{1}{2}$ drachms of powder; **20**, Heisterbergk, took infusions of 5 to 8 drachms, of which he took $\frac{1}{4}$ part at a dose; **20 c**, same, took $\frac{1}{2}$, 1, $1\frac{1}{2}$, and 2 drachms of powder; **21**, Kneschke, took $\frac{1}{4}$ of infusions of 3 to 8 drachms, no symptoms; **21 a**, same, took whole infusion of $\frac{1}{2}$ drachm without result, then 1 drachm; **21 b**, same, took $\frac{1}{2}$, $1\frac{1}{2}$, and 2 drachms of powder without effect; **21 c**, same, took $1\frac{1}{2}$ and 2 drachms of powder; **22**, Kummer, took infusions; **23**, Winkler, took various doses of an infusion; **23 a**, same, took $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2, and $2\frac{1}{2}$ drachms of powder; **24**, Pienitz, took various doses of infusions; **25**, Siebenhaar, took various doses of the infusion; **25 a**, same, took 1, $1\frac{1}{2}$, and 2 drachms of powder; **26**, Jörg, took infusion; **27**, Enders, took $\frac{1}{2}$ drachm of powder without effect, then 1, and after two days $1\frac{1}{2}$ drachms; **28**, Strofern, took $\frac{1}{2}$ and 1 drachm of powder; **29**, Peifer's Thesis, A. H. Z., 19, 201, took 4 scruples tincture in the morning fasting; **29 a**, same, took powdered root; **30**, E. D. Abell, Bost. Med. and Surg. Journ., vol. liv, 1856, p. 117, Mr. E., æt. forty, took nearly $\frac{1}{4}$ ounce of the extract; (31 to 38, Barrallier, des Effects phys., et de l'Emploi therap., de l'Huile essentielle de Valériane, Paris, 1860); **31**, a healthy person, æt. sixty-four years, took 2 drops tincture; **32**, another person took same; **33**, effects of 6 drops; **34**, **35**, other provers took same; **36**, **37**, **38**, other provers took 10 drops each.

Mind.—Extremely delirious, attempting to get out of the window, threatening and vociferating violently. He complained of not being able to see, and did not recognize me nor members of the family about him, and imagined himself away from home, and beset with all sorts of danger, from which he was attempting to escape, although unable to walk without staggering from side to side.³⁰—Agitation.³⁴—Remarkable liveliness with great courage, with slight acceleration of the pulse.²³—More joyous and active mood than usual, in the evening (second and third days).¹⁷—Very joyous mood all day (first day).²⁹—Unusually joyous mood (soon).²³—More cheerful than before; he comprehended everything more easily than

before; a sort of joyfulness, as is sometimes felt after drinking coffee (first day),².—Morbid irritation of the nerves; although he appears more cheerful and vigorous than before, nevertheless his eyes, arms, knees, feel very weak, in the forenoon (after twenty-eight hours, second day),².—(Seriousness) (second day),².—[10.] Anxiety,¹⁶.—Anxious, hypochondriac feeling, as if the objects around him had been estranged from him; the room appears to him desolate, he does not feel at home in the room, he is impelled to leave it (from the vapor),⁵.—Fearfulness in the evening when sitting in the dark (imagining that some one might hurt him), (first day),².—Ill-humor,²⁸.—Disinclination for mental work,³⁸.—Great flow of ideas, one chasing the other, as in intoxication; confused, faint recollections of former thoughts and actions, presented themselves to his mind, but they chased one another with so much rapidity, that he at last became quite stupefied and lost his thoughts; he felt like one who is dreaming (from the vapor),⁵.

Head.—Head much confused (second day),²⁶.—Cloudiness of the head (from the vapor),¹¹.—Feeling of intoxication and vertigo when stooping; sensation as if everything were turning around her (after half an hour),⁴.—Rush of blood to the head,^{21a 21c 26}.—[20.] Rush of blood to the head, with a feeling of fulness, especially under the vertex,²⁶.—Symptoms of congestion of the brain; pressing headache, extending from the right frontal region over the whole head, sometimes seated in the eyes and making them sensitive to every slight effort, at times also passing down to the angle of the lower jaw of the right side and causing a sensation as if asleep,²².—Feeling of fulness in the head, apparently caused by rush of blood to the head, similar to the effect of a tight neckcloth (soon),^{18a}.—Dulness of the head, changing to a pressive-drawing pain, especially in the frontal region,²².—Sudden stupefaction in the head, causing him to stagger and almost to fall to one side, when standing,³.—Stupid feeling in the head when stooping (after a quarter of an hour),⁴.—Feeling in the head as after intoxication, somewhat elated (after half an hour),⁴.—Heaviness of the head,^{32 36}.—Headache,^{18b 36 38}.—Headache at night,¹⁸.—[30.] Intense headache,³⁵.—Headache, usually in the forehead, at times very intense,³¹.—Pressive headache in one or another part of the head,²⁶.—Headache an hour after dinner; pressure over the eyes, as if the eyeballs would be pressed out, especially when moving them, at 1 P.M. (after four hours),².—*Headache, the aching especially violent over the orbits*, at 11 P.M. (second day),².—Transient pain as if he had just had a hard blow on the vertex, a painful, stupefying, contractive sensation, affecting the whole head, although it emanates from the vertex as the centre, afterwards disappearing from the other parts of the head, and lastly from the vertex,³.—Sticking headache,¹.—Sticking headache for eight hours,¹.—**Forehead.** Pressing frontal headache,²⁸.—³ *Violent pressure in the forehead, followed in a few minutes by sticking in the forehead, and especially over the orbits; soon the sticking changes again to pressure, and so on in constant alternation; the sticking is like a darting tearing, as if it would pierce the eyes from within outward*, continuing a few hours (after a quarter of an hour),⁴.—[40.] Pressive pain extending from the right frontal region over the whole head; the headache disappeared during a sound sleep at night, but returned the next morning and lasted three hours,²².—Slight pressive headache, extending from the forehead to the vertex, especially towards the eyes, so that moderate exertion of the eyes caused a pressive sensation in the balls,²².—Pressive pain in the right side of the forehead,²⁷.—Distressing pressive pain in the right frontal region, periodically extending to the left side,²².—Supraorbital headache on the right

side; this headache gradually increased for ten hours, and gave place to a sensation of heaviness,³¹.—Numb tense sensation behind the frontal eminence,³.—A drawing together in the left half of the forehead, with a dull pressure,³.—Constrictive drawing transversely across the forehead (after five minutes),³.—Violent stitches (darting tearing) in the middle of the forehead, deep interiorly, coming and going at intervals (after two, three, and four hours),⁴.†—**Temples.** Dull pressure in the right temple, from without inward, at intervals (after eight minutes),³.—[50.] Transient jerkings in the right temple,³.—**Vertex and Parietals.** Pressing headache over the whole vertex,²⁸.—Sensation as if the vertex were spasmodically constricted,²².—Sticking on the top of the head (10 P.M.),².—Pressure on the parietal bones,²⁶.—Drawing-aching pain in the right side of the head, during the flushes of heat over the cheeks; the pain afterwards extends as an aching pain into the orbit of the right eye; colic one or two hours after (second day),².—A current of air instantaneously causes a drawing pain in the right side of the head, at 5 P.M. (second day),².—**Occiput.** Pressure and drawing penetrating into the side of the occiput (from the vapor),².—Sensation as if some one were hammering internally in the occiput, which became intolerable, so that he forcibly turned his head to and fro (while half asleep in the evening), (second day),^{29a}.

Eye.—The eyes shine,².—[60.] Pressure in the eyes only in the morning after rising; the margins of the eyelids seem swollen and sore, especially in the region of the left inner canthus; they look red (third day),².—Sensation of pressure in the right eye, as of a sty, at noon (after three hours),².—Smarting in the eyes, as if occasioned by smoke, at 3 P.M. (after six hours),².—Burning smarting in the eyes, at 10 A.M. (second day),^{2,4}.—**Orbit.** Painful drawing around the orbits, more toward the side, especially when stooping (after half an hour),³.—**Lids.** Eyes somewhat agglutinated (first day),²⁹.—Pain and swelling of the eyelids (from 1 to 2 P.M., third day),².—Stitches in the inner canthus, at 11 A.M. (third day),².—**Ball.** Tearing in the right eyeball (from the vapor), (after two hours),².—**Pupil.** The pupils are somewhat dilated, at 9 A.M. (after half an hour),².—[70.] Pupils of eyes dilated to nearly whole extent of cornea, even when approached by a lighted candle,³⁰.—**Vision.** Dimness of sight, early in the morning, and pain in the eyes, as if he had not slept sufficiently (third day),².—He sees things at a distance more distinctly than usual,².—Scintillations before the eyes,¹.—Lights before the eyes, in the dark; the closed and dark room seemed to him filled with the light of twilight, so that he imagined he dis-

† Valerian causes several kinds of these darting-tearing pains, which come and go. Similar to these pains are those which appear suddenly. If we compare with those two kinds of pains the jerking pains which are scarcely felt in any other than muscular tissues and the crampy pains, we have a very easy and natural indication of the grounds upon which Tissot's recommendation of Valer. for epilepsy might be considered valid.—FRANZ.

‡ These affections of the eyes, which had been entirely cured by Valer. without any disposition for such pains existing before, were excited at intervals for the period of four months, the cause being frequently unknown; this shows that the symptoms of Valer. are deeply rooted in the organism, and that it is with great difficulty that they are removed. In this respect it is like the mercurial sufferings which frequently last years, and during the whole of one's life, and sometimes return after being dormant for months. There are no mercurial or valerian particles in the system; the organism had been so violently and deeply affected by the poison that the drug-disease had become permanently and constitutionally ingrafted upon the system.—FRANZ.

tinguished the objects in the same; this was accompanied by a sensation as if he felt that things were near him, even when not looking at them; on looking, he perceived that the things were really there, at 10 P.M. (after thirteen hours),².

Ear.—Slight jerkings in the right meatus auditorius (after a quarter of an hour),³.—Crampy drawing in the left ear,³.—Ringing in the ears, in the evening when in bed, and illusion of hearing; he imagined he heard the bell strike, at 10 P.M. (after fourteen hours),².

Nose.—Violent sneezing,³.

Face.—Face injected,³¹.—[80.] Quick painless twitching from time to time beneath the skin of the left cheek, which he thought might be seen; this was not, however, the case; it went off for a short time by moving the hand over the cheek,³.—Repeated transient crampy jerkings in the region of the left malar bone,³.—Painful crampy drawing in the right malar bone, transient (after a quarter of an hour),³.—Pimples in the white of the upper lip and on the cheek; small white vesicles on an elevated red border, painful to touch (fourth day),².—A pressure (almost resembling a darting) in the right side of the lower lip and in the gum of the right canine tooth (after one hour),².—Repeated dartings, as of electricity, in the right ramus of the lower jaw (after seven hours),³.

Mouth.—*Toothache*,¹.—Drawing in the teeth of the lower jaw from before backwards, and in the upper jaw from behind forward,³.—Shooting pains in the teeth,¹.—Feeling of dryness in the tip of the tongue, for a quarter of an hour, without thirst, early in the morning (after three-quarters of an hour),².—[90.] Constriction of the tongue (after a few minutes),²⁹.—Dryness of the mouth and pharynx, followed by salivation,³³.—Gradually increasing sticking pain in the region of the velum pendulum palati, accompanied towards the end with a bitter taste in the mouth and accumulation of saliva, inducing cough (after three-quarters of an hour, from the vapor),².—Profuse and offensive salivation, immediately,³³.—Bitter taste on the tip of the tongue, a quarter of an hour after eating meat and vegetables, when licking the lips (after three hours),².—**Previous to dinner he has a taste and smell as of fetid tallow, at noon* (second day),².—**Early in the morning, after waking, he has a flat slimy taste in the mouth*,².

Throat.—Dryness of the throat,³⁴.—Scraping feeling in the throat,²⁵.—Scraping in the throat, lasting several minutes (soon),^{18a}.—[100.] Scraping sensation in the throat, with an ineffectual desire to hawk (after half an hour),⁴.—Great dryness of the pharynx,³⁶.

Stomach.—*Appetite*. Violent appetite at dinner, affecting the stomach with a sort of nausea (canine hunger); although he remains indifferent when thinking of eating, yet he eats with much relish and a large quantity, at noon (after three hours),².—Great hunger (after a few hours),³⁷.—Loss of appetite,^{25a 28 36}.—Great aversion to tobacco (the prover was a great smoker),³⁷.—Disgust for food, from large doses,³¹.—**Eructations**. Frequent eructations,^{19 19a 37}.—Frequent eructations tasting of the drug,^{28b}.—Inspid eructations,³¹.—[110.] Early in the morning, immediately after waking, risings tasting of Hepar sulphuris,³.—Eructations tasting of the drug,^{20 22}.—Tasteless eructations (after a quarter of an hour),²⁹.—Warm rising from the epigastric region, arresting the breathing,³.—*Frequent empty eructations*,³.—Offensive eructations,³².—Frequent empty risings before the meal (after two hours),².—*Gulping up of a rancid fluid*, not rising into the mouth (heartburn), at 4 P.M. (after seven hours),².—**Nausea and Vomiting**. Nausea (third day),^{29a 36}.—Slight nausea (after a few min-

utes),²⁹.—[120.] Long-continued nausea,^{29a}.—Nausea amounting to vomiting,²⁸.—Nausea and eructations,³⁸.—Nausea and inclination to vomit, on rising in the morning, relieved after eating and in the open air (second day),^{29a}.—**Nausea, with desire to vomit, as if a thread were hanging in the throat, arising from the region of the umbilicus and gradually rising to the fauces, and exciting a copious accumulation of saliva*,¹.—She feels nauseated, faint, her lips are white, and the body is icy cold, followed by vomiting of bile and mucus, with violent shaking chill,².—Transient nausea, as if one would vomit (after one-eighth of an hour),⁴.—*Disposition to vomit*,¹.—Disposition to vomit and vomiting¹⁵.—*Vomiting*,^{1 15}.—[130.] Nightly vomiting,¹.—**Stomach.** The epigastrium and the region of the liver are painful to touch, at 11 P.M. (second day),².—Weakness of the stomach,⁶.—Fulness of the stomach,^{18b 21}; (first day),²⁹.—Feeling of fulness in the epigastric region,^{25a}.—Feeling of greater fulness in the stomach (after half an hour),^{21a}.—Sensation of fulness in the stomach and whole abdomen, and also rising up through the oesophagus,²⁶.—Sensation of fulness in the stomach, without eructations, changing after awhile to ravenous hunger,²⁶.—Heat in the epigastric region,³².—Increased warmth in the stomach (after a quarter of an hour),²⁹.—[140.] Sensation of warmth in the stomach,^{29a}.—Burning and cramps in the stomach, in the epigastric region,²⁶.—Heaviness in the epigastric region,³⁸.—Pressure and heaviness in the stomach,²⁴.—**Pressure in the epigastric region*³¹.—Slight pressure in the epigastric region,^{21c}.—Pressure, which suddenly rises in the pit of the stomach and disappears speedily, with gurgling in the abdomen,³.—Shooting cutting from the pit of the stomach to the umbilical region (after half an hour),³.

Abdomen.—Hypochondrium. Painful jerks in the right hypochondrium,³.—(Pressing sensation in the left hypochondrium, just beneath the last short ribs, while in bed in the morning; on coughing or deep breathing it became a cutting pain),^{20a}.†—**Sides.** [150.] Two evenings in succession, after 10 o'clock, he is attacked with violent colic in the left side of the abdomen, as if there were subcutaneous ulceration (second and third days),^{2 4}.—Dull sticking, intermittent pressure on the left side and over the pit of the stomach, in the region of a cartilage of the ribs,³.—Single stitches in the left side, below the short ribs (after a quarter of an hour),⁴.—**General Abdomen.** *Bloated abdomen*,³.—Distension of the abdomen,²⁶.—Great distension of the abdomen, causing restlessness at night,^{29a}.—Abdomen moderately distended (first day),²⁹.—Hard abdomen,¹.—Much very offensive gas from the intestines,²⁶.—Rumbling and gurgling in the intestines, with some cutting pains, followed after half an hour by a normal evacuation,²⁵.—[160.] Rumbling and colic in the stomach (after a quarter of an hour),²⁹.—Constant rumbling in the upper abdomen (second day),^{29a}.—Rumbling and gurgling in the abdomen,^{25a}.—Feeling in the abdomen as if it would become excessively distended, even to bursting,¹.—Pain in the abdomen when drawing it in, like a pinching and cutting,³.—The whole evening he feels a pain in various parts of the abdomen, which is at one time felt as a pressing in the umbilical region (second day),².—Aching pain in the abdomen,¹.—Dull aching pain in the abdominal muscles, as if bruised, or as if from a cold, worse during an inspiration,³.—Colic in bed, in the

† Possibly caused by a cold.

‡ The principal times of day when Valerian produces its symptoms are noon and the first part of the afternoon and evening and the hours before midnight; the abdominal symptoms especially are felt in the evening.—FRANZ.

evening; a pinching in the lower abdomen (first day).²—A sort of twisting in the abdomen, with a sort of nausea, as if the menses would come on.³—[170.] Drawing pain, as if bruised, in the left iliac region, spreading to the middle of the abdomen, soon followed by rumbling in the bowels, at 2 P.M. (second day).²—Great inclination to draw in the abdomen; he does it even involuntarily (alternate effect).³—Cutting pain in the intestines, in the region of the navel.²⁶—**Hypogastrium.** Severe aching-drawing pain in the hypogastrium, from 10 to 11 P.M. (second day).²—Pain in the left side of the hypogastrium, as if he had sprained the part, when sitting, at 7 P.M. (second day).²—Pressing crampy pain in the left side of the hypogastrium, when sitting, at 11 P.M. (second day).²—Bruised pain in the hypogastrium, especially in the parts covering the os pubis, increasing in paroxysms, as a painful pressure or drawing.³—Drawing pressure in the inguinal glands, only when spreading the thighs; the place is painful to touch (after one hour).².

Rectum and Anus.—When emitting flatus the baby presses very hard, causing the dark-red rectum to protrude, when a few drops of blood fall out.³—Boring pain in the left side of the rectum, when standing, apparently in the sphincter, at 1 P.M. (second day).²—[180.] Boring in the rectum, at 10 P.M. (second day).²—Stitch in the rectum, when standing (after one hour).²—Violent tearing in the anus, when moving a little while sitting.¹; at 2 P.M. (third day).²—On getting up from stool he perceives a severe tenesmus in the anus, as if diarrhœa would set in; this disappears gradually, but returns with great violence in a few hours, obliging him to go to stool again, when he has a natural evacuation.³—A bubbling pressure above the anus, in the region of the os coccygis, apparently close to it, at 9 A.M. (second day).²—A bubbling pressure over the anus, in the parts covering the os coccygis, at 9 A.M. (second day).²—(When emitting flatus the baby cries and presses; occasionally he passes a little blood by the rectum).².

Stool.—**Diarrhœa.**¹⁹—Diarrhœa twice, with tickling at the anus, in the evening (second day).^{29a}—Violent diarrhœa, in the morning (third day).^{29a}—[190.]—Two diarrhœic stools, preceded by rumbling and cutting in the intestines (after seven and nine hours).^{18a}—Frequent evacuations.¹⁹—(The baby, who had had frequent loose stools, has now many more looser and more watery discharges, in which solid particles, resembling pieces of curdled milk, are floating).³—Pasty stools.²⁴—On the first day the stool looks natural; after twenty-four hours he has a greenish papescent stool, with some blood.²—Stools more frequent than usual, always evacuated with some effort.²⁶.

Urinary Organs.—Stitches in the region of the kidneys, when sitting down (after two hours and a half).²—Transient clawing in the region of the bladder (second evening).²—Constant desire to urinate, which he insisted upon doing through the window of the room.³⁰—**Frequent emissions of urine.**^{7 8 12}—[200.] Frequent emission of urine the first three hours.²—Increased secretion of urine; on standing the urine deposited a sediment of brown flakes.²³—Increased secretion of urine.^{19 19a}—Very abundant, highly-colored urine.^{34 35}, etc.—Urine very abundant, more highly colored, and of a stronger odor than natural.³¹—Urine dark brown.²⁶—The urine seemed to contain bile.²⁶—Urine turbid, depositing a whitish sediment (fourth morning); depositing a turbid sediment (fourth day).¹⁷—White sediment in the urine, in the morning.²⁰—Urine dark red and turbid, depositing a vermilion-red sediment.²³—[210.] Urine brownish and turbid, with a brickdust sediment.²⁸—Brownish flakes in the urine.^{20a}.

Urine turbid, depositing a slimy white sediment,^{17a}.—Urine deposited a cloud,^{26a}.—Urine depositing a sediment,^{18b}.—Very copious sediment to the urine, the upper part of which was pale, the lower thick, turbid, and reddish,²⁷.—Mealy sediment in the urine,¹⁸.

Sexual Organs.—Creeping and drawing in the penis, as if it had gone to sleep; frequent erections the day previous, early in the morning (third day),².—Tensive-gurgling pain in the right testicle, when sitting, at 5 P.M. (second day),².

Respiratory Organs.—Frequent hacking cough,³⁶.—[220.] Dry cough,³⁶.—Difficulty of breathing and anxiety in the chest, after the usual breakfast, at 9 A.M. (second day),².

Chest.—Transient oppression of the chest, in the region of the lower true rib of the right side (from the vapor),².—*When walking, he feels a pressure across the lower half of the chest, with oppression of breathing, at 10 P.M. (third day),².—Darting-tearing pain in the chest,¹.—A few sudden jerks, like electric shocks, below the right axilla,³.—*Sudden stitches in the chest and in the region of the liver, from within outward, causing him to start in affright, at 2 P.M. (third day),².—Frequent stitches in the chest, during a slow horseback ride, at 5 P.M. (third day),².—*Violent stitches and pressing from within outward, in the region of the last true ribs, when standing, at 8 P.M. (third day),².—Dull stitch, resembling a pressing from within outward, in the left side of the chest (below the axilla), during an inspiration, especially a deep inspiration; the stitch lasts as long as the inspiration; external pressure excites likewise a sore pain,³.

Heart and Pulse.—[230.] Sudden stitches in the region of the heart, when sitting erect or standing, abating when stooping, only during an inspiration (after two hours),².—Palpitation of the heart,¹.—Increased pulse,⁷.—Pulse 90, in the first quarter of an hour the beats are full and vigorous, in the second the diastole is shorter, the whole body being agreeably warm, and a tremulous anxious sensation being experienced, which seems to come out of the abdomen (after two hours),².†—The pulse is somewhat accelerated and irregular, two or three beats being occasionally quicker than the others; at the same time it is more tense,³.—Pulse 85, at 10 A.M. (third day),².—Pulse 78, the beats of the heart being weak and scarcely felt (after three-quarters of an hour),².—Increase of 4 or 5 beats of the pulse (after a quarter of an hour),²⁶.—Pulse somewhat diminished, subsequently (after three hours) rose by 20 beats,³¹.—The pulse at first fell 16 beats, but subsequently rose higher than the normal,³².—[240.] Pulse 80 before taking, fell to 62, and afterwards rose to 96,³³.—Pulse 64 before taking, fell to 56, afterwards rose to 78,³⁴.—Pulse 80 before taking, fell to 64, and afterwards rose to 90,³⁵.—Pulse 68 (before taking), 56 (after one hour), 78 (subsequently),³⁶.—Pulse 72 before taking, fell to 60, afterwards rose to 74,³⁷.—Pulse 70 before taking, fell to 52, then rose to 72,³⁸.—Pulse 69 (before the experiment); rose to 75, where it remained for some hours (after two hours); associated with rush of blood to the head, feeling of fulness and increased warmth of the face,³⁹.—Pulse frequent, tremulous, and irregular,³⁰.—Pulse unequal, in one minute 60, and in the next 90; weak and small, in the forenoon (after two hours),².—Pulse small,³⁶.

Neck and Back.—[250.] Piercing drawing, with pressure from the

† The first and most rapid effect of Valerian, which precedes any after symptom, is an acceleration of the pulse and congestion of the head.—FRANZ.

nape of the neck to the occiput, when bending the head backwards, at 11 A.M. (after two hours);²—Drawing pain in the back,¹—Rheumatic pains in the scapulæ,¹—*Intense pain in the left lumbar region above the hip, as if he had strained the part much, worse when standing, and especially when sitting, than when walking*,³—A drawing transversely across the small of the back, in the evening, when in bed (first day),².

Extremities.—After walking a little, he feels a stiffness and painful weariness in the bends of the arms and knees, at 5 P.M.,²—Rheumatic pains in the limbs,¹—**In the muscles of the left arm, from the shoulder down to the fingers, a very painful drawing, mixed with single stitches; a sort of tearing, which is neither increased or decreased by any position of the limb; after taking a second dose the tearing returned much more violently (although it had disappeared for several hours); it disappeared afterwards while walking, after a violent stitch in the knee (so violent that she was scarcely able to walk), and was replaced by a pain which moved up and down from the knee to the toes, and back again (felt less when walking than when sitting); finally it affected likewise the right foot, although less*,⁴—**Slow, painful drawing and jerking, as if in the bones of the upper and lower extremities, when sitting quietly*,³—Repeated darts as of electric sparks in the middle of the left thigh, when standing, followed by a bruised pain in the same part,³†—[260.] Bruised pain in the limbs,¹—Paralytic numbness in the limbs,¹—Paralytic pain in the knees, elbows, and shoulder-joints when ceasing to walk (after four hours),².

Superior Extremities.—**Shoulder.** When laying the left arm on the table and bending it, while writing, a drawing pain in the deltoid muscle, from above downward, and in the bend of the elbow; if he lets the arm hang down the drawing changes into a feeling of heaviness, pervading the whole arm as far as the fingers, as if the limb were turgid with blood (after three-quarters of an hour),²—A stinging pain in the region of the posterior border of the deltoid muscle, at 11 P.M. (second day),²—Smarting pressure, as from an excoriation or dull stitch, as with a hard blunt instrument, in the region of the shoulder and in other places,³—**Arm.** Dull pressure, as with the tip of a finger, in the region of the head of the humerus,³—**Crampy darting tearing, like an electric shock, repeatedly through the humerus, in the bone, intensely painful*,³—**Crampy drawing in the region of the biceps, in the right upper arm, from above downward, while writing (from the vapor)*,²—Sudden crampy drawing (a sort of jerking) in the muscles of the upper arm, just above the bend of the elbow and in the outer muscles of the thigh, at noon (fourth day),²—**Elbow.** [270.] Pain as if bruised in the bends of the elbows, when writing, afterwards extending as a drawing pain along the biceps muscle of the upper arm, from 7 to 9 A.M. (third day),²—(Tearing in the elbow-joint),²—Stitches below the tip of the elbow, at 6 P.M. (second day),²—**Forearm.** Tearing in the inner side of the forearm, from below upward, at 4 P.M. (third day),²—**Hand.** Tremor of the hands, heat and redness of the cheeks,⁴ with warmth of the rest of the body, while writing; at 10 A.M. (third day),²—

† On comparing symptoms which Valerian causes in the limbs, they will be found very similar, both as respects the parts (upper arm, thigh) and the nature of the pain. If, in a practical case, such symptoms should occur in the lower limbs, whereas they have been observed in the upper limbs by the provers, the remedy may nevertheless be employed in spite of the difference. The symptoms of the upper and lower limbs alternate frequently, both in the disease and the proving of drugs.—FRANZ.

Sudden violent jerks in the hand, which disappear again immediately; the place is afterwards painful to touch.³.—**Fingers.** Stitches in the middle phalanges of the fingers, in the bones, at 11 P.M. (third day),².—Crampy jerks through the thumb, as if caused by electricity, several times.³.

Inferior Extremities.—**Hip.** Twitching and jerking in the muscles of the right hip.³.—Paralytic pain from the ischiatic region and great trochanter of the right side down to the patella, so that walking was very difficult.^{2a}.—[280.] Feeling of heat like a burning pain in the left hip in bed, at 11 P.M. (third day),².—**Thigh.** Drawing in the outer side of the thighs from above downwards; it is felt only when extending the lower limb sideways; early in the morning (after two hours),².—Crampy pain in the front part of the thigh, extending as far as the groin, at 10 P.M. (second day),².—Pain as if bruised from the middle of the right thigh to above the knee, along the outer side, while riding in a carriage, especially when the carriage jolts; in the afternoon (after six to eight hours),².—**Crampy tearing (tearing-darting) pain in the outer side of the thigh, extending into the hip*; in the afternoon (fourth day),².—When beginning to walk, especially when making a false step, a clawing pain above the bend of the right knee, at 4 P.M. (second day),².—**Knee.** Excessive weakness in the bends of the knees and ankles, with a bruised pain transversely across the thighs and in the small of the back, in the morning after rising (after ten hours, third day),².—Dull pressure recurring at intervals above the left knee, transversely across the thigh; afterwards descending again from the thigh to the knee,³.—Tensive pain from the bend of the knee through the whole calf, when sitting; at 1 P.M. (second day),².—Pain in the patellæ (fourth day),².—[290.] Tearing in the bends of the knees when sitting or standing; from 11 to 12 P.M. (second day),².—After a violent stitch in the left knee she feels a pain extending from the knee to the toes, and back again, afterwards affecting also the other limb; preceded by pain from the shoulder to the fingers,⁴.—**Leg.** Excessive heaviness and lassitude of the legs when standing, going off when sitting (after a quarter of an hour),³.—Bruised pain in the front part of the middle of the tibia when walking, as if the bones had been broken in that part, and had not entirely healed (continuing for days),³.—Lassitude and tension in the calves when standing, in the afternoon (third day),².—Heaviness in the calves; when walking she feels as if she could not get along,⁴.—**Twinging pain in the outer side of the calf when sitting*, at 5 P.M. (second day),².—When laying the right limb across the left, *tearing in the left calf*, at 4 P.M. (second day),².—**Pulsative tearing in the right calf, when sitting, in the afternoon* (third day),².—Even, dull pressure, as with the tip of the finger, on the left side, below the left knee,³.—[300.] Stitch in the front region of the tuberosity of the tibia, at 11 A.M. (third day),².—**Ankle.** Continuous sticking directly over the left malleolus, in the region of the tendo Achillis, at 1 o'clock (third day),².—*Drawing and a weak feeling along the tendo Achillis, towards the heel, as if the part had lost all strength, **when sitting**; **disappearing when rising from a seat** (from the vapor),².—Pain, as if bruised, in the left ankle, while riding in a carriage, when the carriage jolted, *in the afternoon* (after six or eight hours),².—**Transient pain as if sprained in the right ankle; the pain came on after running upstairs fast; it was most felt when standing, scarcely when walking; on the contrary, the pain seems to disappear when walking*,³.—**Sudden pain as if bruised, in the outer malleolus of the right foot; he feels the pain more when standing than when walking*,³.—**Drawing in the tarsal joints, when sitting*, at

4 P.M. (second day),².—**Foot.** * *When sitting*, the heels, especially the right heel, feel painful (fourth day),².—*Constant pain in the heels* (third day),².—* *Stinging and pain in the heels, when sitting* (fourth day),².—[310.] Tearing in the balls of the soles, with subsequent warmth, *in the afternoon* (third day),².—Darting tearing in the inner border of the right foot, repeatedly, as if caused by electricity (after half an hour),³.—**Toes.** The tips of the toes feel painful *in the evening* (fourth day),².—Heaviness in the tips of the three middle toes, accompanied with a drawing pain, and as if there were subcutaneous ulceration, and with a cooling sensation, as if a current of air were moving through the soles as far as the calves, at 4 P.M. (second day),².—Tearing in the dorsum of the toes, especially the great toes, from 11 to 12 P.M. (second day),².

Generalities. Tremulousness, he has no rest anywhere, as one feels when expecting a joyful event (after one hour and a quarter),².—General malaise,³⁶.—General weariness, especially of the extremities,³⁸.—Great debility and drowsiness in the evening (second day),².—General discomfort,^{18b}.—[320.] General discomfort in the whole body,²⁸.—* **Drawing in many places, now here, now there, like transient jerks,**³.—Twitching and jerking in various parts of the muscles, superficially,³.—Smarting pressure as if excoriated, or dull sticking, as with a hard, blunt tool, at a small spot in various parts,³.

Skin.—Eruption, first red and confluent, afterwards numerous small, white, hard, elevated pimples, on the arm and chest,².—Painfully disagreeable itching in the axilla, at 3 P.M. (third day),².—Smarting as if excoriated, in various places that could be covered with the tip of the finger,³.—Smarting in the outer side of the left knee, as if excoriated,³.

Sleep.—Yawning and stretching of the limbs,³.—Repeated yawning with chilliness, soon,³³.—[330.] Drowsiness, soon,³³.—Great tendency to sleep,³⁶.—Tendency to sleep and irresistible sleepiness,³⁸.—She and her baby sleep more quietly than before, without any anxious or confused dreams (curative effect),³.—Sleepiness followed by profound sleep for two hours; on waking the headache had disappeared,³⁵.—Somnolence,³⁴.—* **Sleeplessness,**^{1 18b}.—* *Unusually wide awake in the evening and restless at night, could fall asleep only towards morning, when he had vivid dreams,*^{17a}.—Sleep restless (third and fourth nights),^{17 18}; (first night),²⁹.—Sleep very restless, disturbed by pain in the stomach,²⁶.—[340.] Tossing about in sleep,¹.—Sleep disturbed by dreams,^{17a}.—In the second night the sleep is disturbed by anxious and partly voluptuous dreams; for instance, that he is driving in a carriage through deep water,².—In the first night the sleep is disturbed with many confused dreams; early in the morning he feels very tired,².—Much dreaming during sleep,²⁶.

Fever.—Chilliness. Chilliness,¹.—Chilliness at intervals during the evening (second day),^{29a}.—Thrills of chilliness creep over the whole body from above downward,³.—Tremulous, transient chilly feeling, at 11 A.M. (after two hours),².—Sensation of icy coldness in the upper half of the head, when pressing the hat firmly on the head; 5 P.M. (third day),².—[350.] Paroxysms of shuddering from the nape of the neck downward,³.—**Heat.** Synochus,¹.—* *Constant heat in the whole body, and uneasiness* (first four hours),².—Heat the whole forenoon, and sweat during the slightest motion (third day),².—Heat and sweat over the whole body, especially in the face, as soon as he begins to walk, (first day),².—During dinner he feels heat in the whole body and face, with sweat in the hair on the forehead (after three hours),².—Heat of the skin,^{36 37}.—Feeling of heat in the

whole body and face, with sweat in the hair on the forehead, during dinner (after three hours),².—Increased heat of the skin,³⁴.—Increased warmth of the body the whole day, especially during motion, with sweat breaking out on the face, on the forehead, etc., the pulse being strong, and 80 to 90 (first day),².—[360.] She feels warm all over, except in the region of the hip, where she feels as if cold water were poured over her,³.—Sensation of increased warmth spreading over the whole body, lasting a quarter of an hour, passing off without perspiration,²⁰.—Increased warmth the whole day, with quick and frequent pulse (second day),².—Increased warmth,¹⁷.—General warmth,²⁶.—Agreeable increase of internal and external warmth (first two hours),².—Transient feeling of heat in the head when stooping (after a quarter of an hour),⁴.—**Dry heat in the face and the whole body, in the evening when sitting, at 9 P.M. (second day),².—*Flashes of heat over the cheeks for two hours, several times in the evening*, the pulse being 60; with feeling of dryness on the tongue, without thirst and without previous chilliness (second day),².—In the open air the cheeks become hot and red, without sweat; a quarter of an hour afterwards sweat breaks out over the whole body, and especially in the face; at noon (after three hours),².—*Sweat*. [370.] *Frequent sweat*,^{13 14}.—Marked perspiration,³⁸.—Perspiration at night,²⁸.—Much perspiration during the night,²⁶.—Slight perspiration of the odor of Valerian (after three hours),³¹.—The hair of the forehead sweats about noon, with stiffness of the loins, the pulse being 90 (third day),².—Sweat on the forehead about noon; after dinner the eyes feel weak as after revelry (second day),².

Conditions.—Aggravation.—(*Morning*), Pressure in eyes.—(*Night*), Headache; sweat.—(*Inspiration*), Aching pain in abdominal muscles; stitch in left side of chest; stitches in region of heart.—(*Sitting*), Pain in left lumbar region.—(*Standing*), Pain in left lumbar region; pain in ankle.—(*Stooping*), Feeling of intoxication and vertigo; stupid feeling in head; drawing in orbits.

VERATRINUM.

An alkaloid ($C_{32}H_{52}N_2O_8$) found in the seeds of *Sabadilla*, and in the roots of *Veratrum album* and *Lobelianum*.

Prepared almost exclusively from *Sabadilla*.

Preparation, Triturations.

Authorities. (1 to 6 from Dr. Roth, Journ. de la Soc. Gall., Mat. Med. Pura, vol. i, p. 536.) 1, Magendie, Formulaire de, 1827, p. 65; 2, Bardsley, Journ. de Chim. Méd., vol. viii, p. 289; 3, Kopp, Denkwürdigkeiten, vol. iv, p. 305; 4, Reiche, Preuss. Med. Zeit., 1839, No. 23, p. 117; 5, Gebhard, Szerlesky Zeit. für Ther., vol. i, cap. 3, p. 145, 1841; 6, Ebel, Hufel. Journ., vol. lxxxvii, cap. 2, p. 73; 7, A. Trombull, M.D., On Med. Properties of the Nat. Order Ranunculaceæ, Philada., 1838, effects of internal administration and of ointment; 8, Dr. F. A. Forcke, Phys. and Ther. Researches concerning Veratrine (Brit. and For. Med.-Chir. Rev., 1839 (2), p. 363), effects upon the human body in healthy and morbid conditions; (9 to 12, from Hussmann, Pflanzenstoffe, p. 509); 9, Esche de Veratrine; 10, Von Praag, Virchow's Arch., 7, effects of 3 milligrams, four times a day, on a patient suffering from faceache; 11, Ebers, Casper's Woch., 1835, effects of internal use of 3 to 6 milligrams; 12, same, effects of rubbing in the skin over the stomach; 13, Szerlesky, compiled by Dr. Kurtz, Cest.

Zeit. für Hom., 4, 454, internal administration of $\frac{1}{16}$ th grain and larger doses, twice a day; **14**, same, effects when used externally, especially in rheumatic or renal affections; **15**, Pharm. Journ., vol. x, 1850-1, p. 521, a man took 29 grains in a glass of hot ale; **16**, Samuel R. Percy, M.D., an Inquiry into the Physical and Medical Properties of Verat. vir., Philada., 1864, p. 76, a physician took 30 grains; **17**, C. P. Blake, St. George's Hosp. Rep., vol. v, 1870, p. 69, a woman swallowed some liniment containing about 3 grains.

Mind.—Delirium, with illusions of the senses,⁴.—Anxiety,¹¹.—Great anxiety,¹².—Loss of consciousness,⁴.

Head.—Vertigo,^{4 11}; (after 12 milligrams),⁹.—Great giddiness,¹⁷.—Dull headache (after 12 milligrams),⁹.—A peculiar sensation of oppression and anxiety in the head, a sense of suffocation,¹⁵.

Eye.—Redness of the palpebral and corneal conjunctiva,⁶.—[**10**.] Lachrymation,⁶.—Pupil extremely contracted,¹⁷.

Nose.—Frequent sneezing,⁶.—After vomiting had been produced, violent sneezing came on, and continued for about half an hour,¹⁵.

Face.—Twitching of the muscles of the face (after 6 milligrams),¹⁰.—Violent shocks, tearing pains extending from the face (the place of application) to the vertex,¹⁴.—For some considerable time afterwards, when she was eating or laughing heartily, or talking animatedly, there would frequently be a spasmodic closure of the lower jaw, which would shut suddenly with a loud snap,¹⁷.

Mouth.—Tongue much swollen,¹⁷.—A peculiar biting and formication of the tongue,⁵.—Dryness of the mouth,⁴.—[**20**.] Mouth and throat very sore, as if she had swallowed boiling water,¹⁷.—Intense irritation (caused by the acridity of this agent) of the mouth and pharynx,¹.—Salivation (after 24 milligrams),⁹.—Flow of saliva in the mouth,⁶.—Very profuse salivation,¹.—Frequent salivation, nausea, and vomiting,¹³.—Profuse salivation, lasting several weeks, but without any affection of the tongue or gums,⁴.

Throat.—Constriction of the throat (after 24 milligrams),⁹.—Sense of constriction in the fauces rendering swallowing difficult,¹⁷.—Prickling sensation in the pharynx and stomach, sometimes intolerable,¹¹.

Stomach.—**Appetite and Thirst**. [**30**.] Loss of appetite,¹¹.—Thirst,¹⁷.—Violent, unquenchable thirst,¹.—**Eructations**. Frequent bitter eructations (after 12 milligrams),⁹.—**Nausea and Vomiting**. Nausea,^{2 4}; (after 12 milligrams),⁹.—Feelings of sickness,¹⁷.—A degree of nausea, but this may be obviated by taking care that too large a dose be not given at one time (after 4 or 6 grains, in twenty-four hours),⁷.—Violent nausea and vomiting (after 6 milligrams),¹⁰.—Transient nausea, with constipation,⁵.—Nausea and vomiting,^{11 12}.—[**40**.] Vomiting,^{1 2}.—Copious vomiting,¹⁶.—**Stomach**. Slight transient burning in the stomach,⁵.—Coldness of the stomach (after 6 milligrams),⁹.—A peculiar feeling in the stomach, increasing after large doses to a burning,¹³.—Cramp of the stomach,^{6 7}.

Abdomen.—Electric streams along the nerves of the abdomen and breast (from an inunction to the back),¹⁴.—Great pain extending over all the nerves of the abdomen,¹².—Colic,¹³.—A peculiar sensation which she described as if the whole of the intestines were tied together by a strong cord continually tightened,¹⁷.

Stool.—[**50**.] Diarrhoea,¹³.—Slimy diarrhoea (after 24 milligrams),⁹.—Profuse watery stools,².—Relaxation of the bowels with tenesmus,¹⁷.—Very

copious stools,¹.—Soft stools (after 12 milligrams),⁹.—Stools of bloody mucus,⁴.—Evacuation of mucous substances,⁶.

Urinary Organs.—Spasmodic contraction of the bladder, with evacuation of watery urine,¹⁴.—Urging to urinate,¹⁵.—[60.] Continual calls for micturition independently of the quantity passed during the action of the bowels, which had freely moved twice or thrice,¹⁷.—Ineffectual efforts to urinate (primary effect),⁵.—Increased secretion of urine (secondary effect),⁵.—Scanty, red, thick urine,⁴.

Respiratory Organs.—Breathing hurried,¹⁷.

Heart and Pulse.—Burning pain in the præcordial region,¹.—Excessive feebleness in the action of the heart,¹⁷.—Pulse quick and small,¹⁷.—Decided diminution of the beating of the heart,¹⁴.—Sinking of the pulse from 90 to 72,¹⁶.—[70.] Pulse fell from 90 to 64 (after 6 milligrams),¹⁰.—Loss of pulse at wrist,¹⁶.

Back.—Dull pain in the back,¹⁴.—Dull pain, afterward burning, in the lower part of the spinal column, followed by pain in the bowels and prepuce, watery and mucous evacuation, accompanied with jerking in the lower extremity,⁴.—*Drawing pain along the spine*,¹².—Sensation of boiling water running over the back,¹⁴.

Extremities.—Paralysis of the limbs,⁴.—Feeling of numbness and formication in the extremities,⁶.—Painful jerking in the toes,⁶.

Generalities.—Trembling and uncertain movements, when he wishes to lay hold of anything, he misses his grasp,⁴.—[80.] Subsultus tendinum (after 6 milligrams),¹⁰.—Twitchings,¹².—Slight twitchings in various muscles,¹⁴.—Felt dreadfully tired, weak, and faint, as if she had undergone some tremendous exertion, though she had enjoyed an excellent night's rest,¹⁷.—Great weakness (after 24 milligrams),⁹.—Prostration,¹⁶.—Faintness (after 6 milligrams),¹⁰.—Violent collapse, with vertigo, obscuration of vision, paleness of the face, cool skin, weak, irregular, rapid pulse, followed by violent vomiting, trembling of the whole body, sweat, depression (after 3 milligrams of Acetate),⁹.—Great agitation, with violent vomiting,³.—After a person has taken, for two or three times, from $\frac{1}{6}$ th to $\frac{1}{4}$ th of a grain of Veratria, frequently, indeed, in from half an hour to an hour after the first dose, there arises a feeling of tingling, sparkling, prickling, in parts remote from the stomach, most commonly in the joints of the fingers and toes, sometimes in the elbows, bends of the knees, and shoulders, occasionally on the forehead or over the eyebrows, more rarely and at longer intervals in the thighs, abdomen, or back. Simultaneous with this, or soon after, some patients experience a sense of warmth, others of cold, referred to different regions of the extremities and trunk, mostly in the hands and soles of the feet, the knees and mouth. While one has the feeling as if a stream of warm air or drops of hot water were issuing from these parts, another perceives, as it were, a frozen atmosphere around the feet, and particularly the knees, or as if cold water was poured upon them. Some compare the sensation in the mouth to that produced by sucking peppermint. In general the warmth occurs where there is integrity of the vital powers, but abdominal torpor, while old hypochondriacs and hysterical women, with predominant asthenia, experience the cold,⁸.—[90.] Sensation of warmth in the stomach, which gradually extends itself over the abdomen and lower part of the chest; after the dose has been repeated once or twice, the same feeling is experienced in the lower extremities, and particularly in the feet; the upper extremities and head become also affected in the same manner, and if the medicines be pushed further, a sensation of

tingling, exactly similar to that caused by friction with Veratria ointment, manifests itself in various parts of the body, and sometimes over the whole surface of the skin; this is generally accompanied by considerable perspiration, and some feeling of oppression, and all these effects are augmented by heat, or by the use of warm diluents; to this succeeds a sensation of coldness; and should their administration be still continued the stomach becomes affected, and a degree of nausea takes place, followed by vomiting. In a few instances only have they acted as diuretics, and in still fewer as purgatives (after $\frac{1}{8}$ grains),⁷.—Sensation of electric streams in the nerves,¹⁴.—Shooting pain like electric shocks, in various muscles and joints,¹⁴.—Beside the above sensations, there is occasionally superinduced this peculiar phenomenon, namely, that a pain, which may have been of long standing in some part of the body, either suddenly disappears altogether, or else is replaced by another, equally sudden in its invasion, in some distant part. Examples are not wanting of a limb or of the muscles of the face, especially if previously the subject of painful or spasmodic paroxysms, becoming seized with starting and tremor soon after taking the medicine. Thus, in from half an hour to an hour after the dose had been swallowed, parts began to start, which were in a half paralyzed state from apoplexy, or which used to present violent spasms or trembling during severe paroxysms of *tic douloureux*. In some cases the development of heat was very marked. In the case of a torpid lymphatic subject, in whom, from “abdominal epilepsy,” the left arm had gone into a half-palsied state, attended with frequent twitchings, a fleeting but sensible warmth succeeded the application of Veratrine,⁸.—Antidote: coffee, mixed with a little lemon-juice,⁴.

Skin.—When rubbed into a very delicate skin it sometimes causes an erysipelatous inflammation, with inflammatory redness and very violent pain, even nettlerash eruption,¹⁴.—Sometimes an evanescent blush pervades the surface, and in rare instances a quantity of eruption has appeared upon the part, but these bear only a small proportion to the cases in which no effects were produced (from application of ointment),⁷.—After the ointment has been applied a sufficient length of time to put the constitution completely under its influence, the feeling of heat and tingling extends itself from the place where the friction may have been made, over the whole surface of the body, and produces sensations similar to those arising from the internal use. The sensibility of the parts over which the application has been made, is increased so as to render them peculiarly susceptible of the presence of certain stimuli, particularly electricity or galvanism; these agents have in some instances been applied along with the Veratria ointment, but have given rise to sensations so acute as to render their further employment almost insupportable, and that without the slightest perceptible alteration of the surface (after application of ointment),⁷.—At least two months after the itching had subsided, there continued an exceedingly troublesome tingling all over the skin, as if she had been stung by nettles, though without any rash, or indeed any sort of appearance of irritation,¹⁷.—A continual tingling over the skin, and now and then sudden fits of the most unbearable itching in different parts of the body, compelling her to scratch and rub vigorously in the most uncontrollable manner,¹⁷.

Fever.—[100.] Coldness, warmth, sticking, and prickling,¹⁴.—Cold extremities,⁴.—The extremities are so cold that he is obliged to use a foot-stove,⁶.—Sweat,¹³.

VERATRUM ALBUM.

Veratrum album, Linn.

Natural order, Liliaceæ.

Common names, White Hellebore; (G.), Weisse-Niesswurz, (Fr.), Le Varaire Blanc.

Preparation, Tincture of the root.

Authorities. (Nos. 1 to 32 from Hahnemann, R. A. M. L., 3.) 1, Hahnemann; 2, Becher; 3, Franz; 4, Fr. Hahnemann; 5, Stapf; 6, Teuthorn; 7, Alberti, Jurisp. Med., vi, 718; 8, Alston, Lectures on Materia Medica ("2, 458, statement," Hughes); 9, Benivenius in Schenk, viii, obs., 174 ("observation of poisoning," Hughes); 10, Bergius, Mat. Med., p. 872 ("statement," Hughes); 11, Borrichius, Acta Hafn., vi, p. 145; 12, Dessenius, Composit. Medicam., lib. x, p. 422; 13, Dobolewsky in Eph. Nat. Cur. Dec., 1 ann. 2, p. 279 ("should be Dobzewsky; effects of root taken medicinally," Hughes); 14, Ettmueller, Op., Tom. II, p. 435 ("as last," Hughes); 15, Forestus, xviii, obs. 44 ("as Benivenius," Hughes); 16, Galenus, Comment. V. Aphor., 1 ("statement," Hughes); 17, Gesner, Epist. Med., p. 69 ("effects of infusion," Hughes); 18, Grassius, Misc. Nat. Cur., Dec. 1 ann. 4 ("p. 99, as Dobolewsky," Hughes); 19, Greding, Miscellanies, p. 87 ("effects when administered to maniacs, melancholics, and epileptics," Hughes);† 20, Kalm, Nord-america. reise, III ("p. 93, of English translation, statement," Hughes); 21, Ledelius, Misc. Nat. Cur., Dec. III, ann. I, obs. 65 ("effects of infusion in wine," Hughes); 22, Lentillius, Misc. Nat. Cur., Dec. III, ann. I, app. ("p. 130; as last," Hughes); 23, Lorry, De Melanch., II, p. 312 ("effects of cooked root," Hughes); 24, Müller, Hufel. Journ., xii, 1 ("p. 160-6, observation on a patient," Hughes); 25, Muralto, Misc. Nat. Cur., Dec. 2, ann. II, p. 240 ("as Dobolewsky," Hughes); 26, Reimann, in Bresl-Samml., 1724 ("p. 537, as Ledelius," Hughes); 27, Rödder, in Alberti, Med. leg., obs. 15; 28, Scholzius, in Schenk, lib. viii, obs. 178 ("as Benivenius," Hughes); 29, Smetius, Misc. Med., p. 265 ("observation," Hughes); 30, Smyth, Med. Communications, I ("p. 207; effects of tincture given for cutaneous disease," Hughes); 31, Vicat, Plantes venen. de la Suisse, p. 177 ("from powder taken by mistake for pepper, in soup," Hughes); 32, Winter, in Bresl-Samml., 1724 ("p. 269, observation," Hughes); 33, Lembke, N. Z. für H. K., vol. vii, p. 73, took root in doses of 2, 4, and 6 grains; 34, Schelling, A. H. Z., 83, p. 19, took 1st dil. of a trituration of dried root in the evening (first day), 1 drachm 1st trit. (second day), a dose of 1st (sixth day); 34 a, same, took 12th dil. in water, a teaspoonful three times a day; 34 b, same, took 300th dil. (Jenichen), (first day), another dose (twelfth day); 34 c, same, took a dose of 300th, followed by frequent olfaction of trituration; 34 d, same, took 30th dil.; 34 e, same, took 1 drop 20th; 35 to 37, Horn's Archiv, 1815 (Frank's Mag., 2), effects of the root; 35, a woman, æt. 60 years; 36, a man, æt. 60 years; 37, a man, æt. 28 years; 38, Wagner, Rust's Mag., 1823 (Frank's Mag., 1), poisoning by the roots; 39, Stohr's Med. Journ., quoted by Bernt (Christison on Poisons, p. 673), a man took twice as much as could be held on the point of a knife; 40, Barkenhausen, Casper's Med. Woch., 1836, No. 7, p. 35 (Hom. Vjs. 6, 97), a man drank

† All symptoms of the mind and disposition, occurring in the first two classes, and all spasmodic and convulsive phenomena manifested by the third, have been bracketed, as the doses administered were too small to induce them.—HUGHES.

some in brandy; **41**, same, an elderly woman took a little of same; **42**, Dr. Mavel, Gaz. des Hop., 1851 (S. J., 71, 307), effects on a family, especially on a woman æt. 70 years, of eating soup cooked in a vessel in which an infusion of Verat. alb. had been made; **43**, Dr. Smith, Journ. de Chem. Med., 1857, p. 604, a man ate soup containing some of the root; **44**, Pharmacologia, p. 716 (Cattell, Brit. Journ. of Hom., 11, p. 343), symptoms; **45**, from the Arabic of Abbubete Rhazes (Peiper's Thesis, A. H. Z., 19, 196); **46**, Dr. Walzl, Dr. Bruckner's Rep. (A. H. Z., 47, 48), made 1 ounce decoction of 2 scruples of the leaves, of which he took a dessert-spoonful, and repeated the dose after an hour; **47**, Dr. Blas, Verh. d. nat. Gesel, Freiburg (S. J., 109, 291), a child, æt. 3½ years, drank an infusion; **48**, Drs. Nivet and Giraud, Gaz. Hebdom., 1861, S. J., 112, 287, poisoning by the powdered root mixed with food; **49**, second case of same; **50**, Sharp's Essays on Medicine, 10th edition, a healthy young man took 1 drop of 1st dil. of tincture, night and morning, for four or five days.

Mind.—Emotional. [Delirium, he thinks that he is a hunter],^{19.†}—**Slight delirium; coldness over the whole body with open eyes, with cheerful, at times laughing expression, he prattles about religious subjects and about vows to be performed, prays, believes that he is not in his own house (after one hour),*¹—Slight delirium,^{18.‡}—[He imagines that he is a prince and behaves in a very haughty manner],^{19.§}—**Persistent raging with great heat of the body,*^{19.}—[Rages, tears his clothes and does not talk],^{19.§}—[Swallows his own faeces],^{19.§}—[Bites his shoe and swallows the pieces],^{19.§}—[Stamps his feet, with loss of appetite],^{19.§}—**[10.]** [He is very noisy, tries to escape, and can scarcely be held back],^{19.§}—**Cursing and howling all night and complaining of being stupid, with headache and salivation,*^{19.}—[He thinks that he is dumb and blind, and has a cancer],^{19.§}—[She kisses everybody that comes in her way, before the menses],^{19.§}—[She imagines that she has labor pains],^{19.§}—[She fancies herself pregnant],^{19.§}—[She expects a speedy parturition],^{19.§}—**She is inconsolable over a fancied misfortune, runs about the room howling and screaming, looking upon the ground, or sits brooding in the corner, wailing and weeping in an inconsolable manner; worse in the evening; sleeps only till 2 o'clock,*¹—[Screaming and running about, with paleness of the face and fear],^{19.§}—[Frequent paroxysms of running about the room till sinking down],^{19.§}—**[20.]** [Screaming and running about, with dark-blue face],^{19.§}—[She clasps her hands over her head and sings, with cough and very tenacious mucus in the chest],^{19.§}—Sensation in his whole being as if he were gradually nearing his end, though with tranquillity,¹—**He groans, is beside himself; does not know what to do with himself (after two or three hours),*¹—When he is busy his head is freer, but when he has nothing to do he seems dazed, cannot easily think, is quiet and absorbed in himself (after two and fifteen hours),³—[Laughter, alternating with whining],^{19.§}—[He sings and trills very joyously at night],^{19.§}—Joyfulness, sharpness of mind,^{17.}—Very lively, eccentric, excessively joyful,¹—*Taciturn,*¹—**[30.]** [Talkative],^{19.§}—Taciturnity, it vexes him to speak a word, talking is very irksome; he speaks in a low and weak voice,⁵—Melancholia, with chilliness, as if dashed with cold water, and with frequent qumishness,¹—Mild despondent mood, even to weeping (after twenty-four hours),¹—**Depression of spirits, despondency and discouragement, with involuntary weeping and running of tears from*

† Bracket.—HUGHES.

‡ Bracket.—HUGHES.

† The original is "*vix mente constans.*"—HUGHES.

‡ Not found.—HUGHES.

the eyes, and inclination to hang the head.¹—Mood gloomy, depressed, can scarcely talk (fifth day).³⁴.—*Anxiety,^{23 25 26 27}.—Great anguish,⁴³.—Anxiety and vertigo,¹⁹.—Anxiety causing crawling in the fingers.¹.—[40.] *Extreme anxiety taking away the breath.¹.—Great anxiety in the morning.¹⁹.—[Anxiety, screaming and running about].¹⁹.†—Great anxiety through the whole night.¹⁹.—Extreme anxiety in the evening and after dinner, so that he did not know whether he should turn.^{3 19}.—*Anxiety as from a bad conscience, as if he had committed a crime.¹.—Anxiety as if he dreaded a misfortune, as if some evil were impending.¹.—(Anxiety after going to bed in the evening, lasting until almost midnight, with waking coma, and drawing movement in the abdomen, which causes roaring in the head).¹.—*He is utterly unable to rise for eight hours, is obliged to either sit or lie; if he stands he is tormented by the most frightful anxiety, wherewith the forehead becomes covered with cold sweat, and he becomes sick even to vomiting (after three hours).⁶.—Anxiety with fear of apoplexy during an evacuation of the bowels.¹.—[50.] *Fear.¹.—[Fearful and easily startled].¹⁹.†—[Fear ending with frequent eructations].¹⁹.†—*Loss of courage, despair.¹.—Ill-humor (first day).^{34a}.—*Ill-humored when provoked (after four hours).¹.—He says nothing except when irritated, and then he scolds.¹.—Irritable, inclined to be vexed with every interruption at work (sixth day).^{34a}.—Ill-humor in the forenoon; no inclination to work (seventh day).³¹.—He becomes very peevish, every trifle excites him (after one hour).⁵.—[60.] [Cannot endure to have any one speak to him].¹⁹.†—Vexation from the slightest cause, with anxiety and palpitation, with rapid, audible respiration.².—He seeks out faults in others and contemplates them.¹.—A certain indifference all day, so that he frequently rubs the forehead in order to think clearly and to collect his thoughts.².—Indifferent, depressed mood, irritated by every work which does not go to suit him, with weakness (second day).^{34b}.—Restless mood, oppression and anxiety (after one hour).².—Busy restlessness, he undertakes several things, but is always soon weary and accomplishes nothing.⁵.—**Intellectual.** Oversensitiveness; increased mental power.¹.—Inclination and desire to work.¹.—Disinclined to think, answers with difficulty, cannot apprehend quickly what he hears, use his judgment, nor find the right answers (second day).^{34b}.—[70.] He cannot get on with mental work; there is very soon a loss of ideas.⁵.—Loss of ideas.¹.—[He does not recognize his relatives].¹⁹.†—Memory leaves him.¹.—[Almost complete loss of memory, he forgets the word he was about to speak].¹⁹.†—Stupefaction.⁴⁵.—Stupidity, difficulty of thought, distraction (first day).^{34b}.—Almost complete loss of senses.³¹.—His reason leaves him.¹.—Is conscious only as in a dream.¹.—[80.] Loss of consciousness.^{36 47}.—Waking coma; one eye is open, the other closed or half open, and frequent starting up as if frightened (after half an hour).¹.

Head.—Confusion and Vertigo. Dizzy confusion of the head (first day).^{34b}.—*Vertigo,^{21 30}, etc.—Excessive vertigo.²⁶.—Very dizzy in the morning.¹.—Vertigo and intoxication (after twenty-four hours).⁴.—Vertigo when walking (second day).^{34b}.—Incessant dizziness for three days.⁴.—Vertigo with aversion to all food.³⁸.—[90.] Vertigo; everything turned about in a circle (after three hours and a half).^{1 19}.—Dizzy, it seems as if there were nothing firm in his head.¹.—Vertigo, so that he was obliged to steady himself while walking, with the pulse at 65 (sixteenth day).^{34b}.—Vertigo, especially when walking, so that he is obliged to steady himself (third

day),^{34b}.—Vertigo towards noon, and perspiration at night, before the menses,¹⁹.†—Vertigo, especially on rising from a seat, with violent pressure in the vertex, pain in the arms, vanishing of vision, creeping coldness through the arms,³³.—**General Head.** Apoplexy,¹⁸.‡—**Blood rushes violently to the head on stooping* (after eight hours),¹.—Head heavy (first and ninth days),^{34b} ^{34c}.—Head heavy, with pressing pain,^{34c}.—[100.] Head heavy, oppressed (third day),^{34b}.—Head heavy, confused,³³.—Head heavy, dull,³³.—Head heavy, dizzy on rising in the morning (sixth day),^{34a}.—The head seems heavy, and everything in it seems to turn in a circle,²¹.—Head heavy, confused, empty, with peevishness and disinclination to do anything the whole forenoon (fourth day),^{34b}.—Head heavy, dull, talking is difficult, as if he could not think of the words (fifth day),^{34b}.—Head dull (tenth day),^{34a}.—Dullness of the head, with nausea for two days,⁴.—Painful dullness of the head, with tensive pressure, now in the temples, now in the whole of the vertex, most violent when sitting erect and standing, relieved by stooping, and also by lying upon the back, with rather contracted pupils,⁵.—[110.] Headache,²¹; (fifth day),^{34a} ⁴⁷.—**Headache, with vomiting of green mucus*,¹⁹.—Headache, with some stiffness,¹⁹.—Headache and pain in the back, with colic and qualmishness,¹⁹.—Headache increased even to reeling while walking, but it diminished again while sitting (after two hours),⁶.—Headache as if the brain were broken,¹.—Headache, heavy, tense, and stupefying (second day),^{34b}.—Constrictive headache, with constrictive pain in the pharynx,¹.—Violent headache (second day),⁴³.—Violent headache with flow of urine,¹⁹.—[120.] Violent headache, which disappears on the appearance of the menses,¹⁹.—Sudden violent headache and intolerable pain in the occiput (after six hours),⁴⁶.—**During menstruation (which had not occurred for six weeks), headache (tearing?), especially in the morning, with qualmishness; diminished in the evening*,¹.—**Paroxysmal pain here and there in the brain, consisting of a bruised sensation and pressure*,¹.—Stupefying pressing pain in the head (fifth day),^{34a}.—Pressing, tensive headache over the whole head (seventh day),^{34b}.—Tension in the head between the temples (after half an hour),^{34b}.—Drawing pain in the head and small of the back,¹⁹.—[Shattering in the head and jerking in the left arm, with paleness of the fingers],¹⁹.§—Sensation of a cold wind blowing through the head,³³.—[130.] Pressing throbbing headache,¹.—Intermittent throbbing headache (after six hours),¹.—**Forehead.** Throbbing headache over the left eye for a quarter of an hour (after one hour),¹.—Pressure in the forehead,³³.—Pressure, heat, and heaviness in the forehead,³³.—Pinching pain in the forehead (first day),^{34b}.—Single stitches in the forehead, even while sitting (after four hours),⁶.—Sticking pain in the left side of the forehead (fifth day),^{34a}.—Buzzing and roaring in the forehead, with dull internal headache (after four hours),³.—Tension in the sinciput (first day),^{34b}.—**Temples.** [140.] Dull pressing headache, which extends from the temples to the forehead, aggravated by bending forward, relieved by bending backward and by external pressure, on the contrary recurring on rising up (after three hours),⁶.—(A sensation extending downward in the temples as if a drop of water were running down, though not a cool sensation),¹.—Stinging in the temples (seventh day),^{34b}.—Sticking in the temples (sixth

† "Schwindel" represents "Drehen im Kopfe," whirling in the head.—HUGHES.

‡ By this symptom the reporter simply means unconsciousness, which supervenes upon much vomiting and purging.—HUGHES.

§ Bracket.—HUGHES.

day),³⁴.—**Vertex.** *Headache in the vertex like a flattening pressure, which becomes a throbbing on movement.².—*Dull pressure on the crown of the head in the morning after waking.¹.—Internal cutting in the vertex (after four hours),³.—Pressing headache in one side, associated with the pain in the stomach (after four hours),¹.—**Occiput.** Tension in the occiput and forehead (fifth day),³⁴.—Constant sticking pain deep in the occiput, with tension of the occiput (first day),³⁴.—**External Head.** [150.] Sensation in the hair on the right side of the head; as if a bunch of hair were electrified crawling and bristling of the hair, with slight shivering in the skin under the hair (after five hours, and afterwards),².—Tension in the skin of the forehead, with a feeling as if difficult to move, and a pressure (first day),³⁴.—(Itching on the head), (first day),³⁴.—Itching, biting stitch on the scalp, provoking scratching (after ten hours and a half),³.—Itching on the forehead,¹.

Eye.—Objective. *Eyes distorted, protruding,¹.—Eyes turned upward, so that only the white could be seen, for an hour,¹¹.—Eyes staring,⁴.—Eyes without lustre,¹².—*Eyes surrounded by black rings,⁴⁸.—[160.] Violent inflammation of the eyes,¹⁹.—Painful inflammation in the eyes, with excessive headache, on account of which he was unable to sleep at night (after six days),¹.—Inflammation of the eyes, with tearing pain,¹.—Inflammation of the white of the eye, with tearing pain,¹.—Redness of the white of the right eye,¹⁹.—Inflammation of the right eye, with febrile heat,¹⁹.—Inflammation of the right eye,¹⁹.—Blueness of the left eye, with frequent eructations,¹⁹.—*The eyes have a weak look, are surrounded by blue rings,¹.—**Subjective.** Pain in the eyes,¹⁹.—[170.] Pressing pain in the eyes, with loss of appetite,¹⁹.†—Complained of pain in both eyes, and moved the hands over the head,¹⁹.—Sensation of weakness in the eyes,¹.—Heat in the eyes, with headache,¹⁹.—Violent, long-continued sensation of heat in the eyes,¹.—Sticking and burning in the eyes, increased in the open air (first day),³⁴.—Heat in the eyes and face, with redness of the cheeks, as from a draught of hot steam,¹.—**Lids.** Lids agglutinated, difficult to open, on rising (fifth day),³⁴.—Lids agglutinated during sleep (after two hours),¹.—A kind of paralysis of the lids, they seem too heavy, can scarcely raise them with the greatest effort,¹.—[180.] *Extreme dryness of the lids,¹.—*The lids are dry, especially after sleeping; are painful as if rubbed sore; are stiff and agglutinated,¹.—*Acute sensation of dryness in the upper lid, as if salt were between it and the ball, without great redness of the eye, at noon, after dinner,⁵.—*Sensation of dryness of the lids,¹.—Pressure in the eyelids, as from too great dryness, after a short midday nap, followed by watering of the eyes (after six hours and a half),⁵.—Burning in the eyelids (sixth day),³⁴.—Painful pressing stitches in the upper lid by the outer canthus (after ten hours),³.—Fine sharp stitches in the canthi,³.—Fine sticking itching internally in the coverings of the eyes (after two hours),³.—**Lachrymation.** Eyes watery,³⁴.—[190.] Lachrymation, moisture in the eyes (third day),³⁴.—Lachrymation, with dimness of the eyes (third day),³⁴.—Frequent lachrymation, with redness of the eyes, as in coryza (after six hours),².—The eyes seem watery, as if covered with albumen,⁶.—Violent running of water from the eyes and cutting pain, together with a sensation of dryness and heat in them (after half an hour),¹.—**Pupil.** Pupils dilated,¹,³⁵, etc.—Pupils greatly dilated (after four hours),¹,⁶,⁴³.—Pupils excessively dilated,

† Therewith the blood has the appearance of inflammation (buffy coat).—HAHNEMANN.

with very decided weakness of vision; he could not recognize persons standing near him, or only very slowly, at 7 P.M. (after eight hours),⁵.—Pupils at first contracted, afterwards dilated, with weakness and inclination to sleep, even while walking,³³.—Pupils inclined to contract,¹.—[200.] Contraction of the pupils, with constant compressing pain in the eyes (after one hour and a half),¹.—**Contracted pupils* (immediately and after six hours),².—Pupils very much contracted during the first six hours,⁵.—**Ball.** Eyeballs have a rotary motion,⁴⁷.—The right eyeball is painful at the outer canthus, as if beaten, in repeated paroxysms; when pressing upon it ceases to ache (after three hours),³.—**Vision.** Vision vanishes, he cannot see,¹¹.—Vision somewhat obscured,⁴⁹.—Vision at times indistinct,³³.—Complete blindness,³⁶.—Complete loss of vision; restored next day,⁴².—[210.] *Double vision*,¹.—Sparks before the eyes,¹⁹.—On rising from a seat black spots and sparks before the eyes, on account of which he could not stand for eight hours, but was obliged to either sit or lie (after three hours),⁶.—Numerous shining spots flit before the eyes,³³.

Ear.—Tearing in the lobule of the ear,¹.—Sharp stitches just behind the left ear and in the jaws,¹.—Sensation as if a membrane were stretched over the ear,¹.—In the right ear a sensation of a cold breath, followed by a sensation of great heat, then again cold, and so alternately several times (after twenty-six hours),⁵.—Pressing pain in the meatus auditorius,¹.—A pressure in the right ear, in the morning (after two days),¹.—[220.] Some stitches deep in the left ear,⁶.—**Hearing.** Diminished hearing (third day),^{34b}.—Dulness of hearing, one ear or the other seems stopped,¹.—Ring- ing in the ears,¹,⁴⁹.—He complains of deafness and pain in the chest,¹⁹.—Roaring and rushing in the ears, immediately on rising from a seat, also there seems to be a bright fire before the eyes, lasting eight hours (after four hours),⁶.—Roaring in the ears like a wind and storm,¹.—Whistling in the right ear, preceded by dulness of hearing; once after the whistling the hearing was clear; after two minutes it was again dull (first day),^{34b}.

Nose.—Frequent sneezing, catarrh, much nasal mucus (second day),^{34a}.—Frequent sneezing (seventh day),^{34b}.—[230.] Violent, very frequent sneez- ing,²⁵,^{34c}.—Catarrh (after eight hours),¹.—Violent and very peculiar catarrh (seventh day),^{34b}.—Acute catarrh, lasting five days, followed by se- cretion of mucus in the fauces and throat, the mucus gelatinous, with some membranes of yellow-brown mucus (ninth day),^{34b}.—**Epistaxis*,⁴⁴.—Bleeding from the right nostril,¹⁹.—Nosebleed before the menses,¹⁹.—(Nose- bleed during sleep, at night),¹.—His nose becomes dry and hot, as in dry catarrh (after six hours),⁵.—*Sensation as if the nose internally were com- pletely dry, such as the dust of a dry road would produce* (after three hours),¹.—[240.] Sensation of compression and pressing inward in the nasal bones,¹.—Sensation as if the nose were ulcerated internally,¹.—Sharp burning in the left nostril,³³.—Smell of dung in the nose (after sixteen hours),¹.

Face.—Swelling of the face for several days,¹⁹.—***Face sunken, with anxious expression**,⁴⁸.—Convulsive movements of the face and limbs,⁴⁷.—**Face bluish*,¹.—Face dark colored, with an expression of anxiety,⁴².—Face dark red, hot,¹⁹.—[250.] Extreme redness and heat of the face,¹⁹.—Red face, with great thirst and flow of urine,¹⁹.—***Paleness of the face**,¹⁹.—Face and lips pale,³⁵.—***He became pale in the face, with the frequent stools**,¹⁹.†—Sudden alternations of paleness, with heat and redness of the face,¹⁹.—(Painful jerking sensation in the muscular parts of the face),

† Revised by Hughes.

(after three hours),¹.—Drawing and tensive pain over the whole right side of the face and right ear,¹.—Burning in the face and head,¹⁷.—**Cheeks.** *Twitching in the cheeks, at noon, sparks before the left eye, *paleness of the face and faintness, followed by vomiting of a quantity of white froth* (the attacks recurring for three days),¹⁹.—[260.] Stitches in the right cheek and right chest, with salivation,¹⁹.—**Lips.** Cracking of the skin of the lips,¹.—Dry lips and mouth, in the evening, not without thirst (after thirteen hours),³.—Burning on and somewhat above the red of the upper lip,¹.—**Jaws.** *Jaws closed,¹.—*Stiffness of the masseter muscles,³³.—Dull pressure in the muscles of the left side of the jaw, like a violent pressure with a dull point of wood,¹.—While eating all the muscles of the lower jaw become sore, as if bruised, so that he is obliged to stop chewing,⁶.—Smarting pain on the forepart of the lower jaw (after nine hours),³.—Sticking pain in the articulations of the jaws, on opening them, which prevents his drawing down the jaw as usual (after four hours),⁶.—[270.] Needlelike stitches in the right jaw, frequently through the day (second day),^{34a}.

Mouth.—Teeth. Looseness of the teeth,¹.—Towards the end of the menses grinding of the teeth and bluish face,¹⁹.—Grating of the teeth,¹⁹.—Toothache, followed by swollen red face,¹⁹.—Toothache consisting of pressure and heaviness in the left upper back teeth, as if they were filled with lead,³.—Severe toothache and headache,¹⁹.—Toothache at first pressive, afterwards when chewing, ending in a drawing streaming into the roots of the teeth, when something even soft was taken between the teeth,³.—Teeth acutely affected by cold wind (seventh day),^{34b}.—Boring in the upper incisors,³³.—**Gum.** [280.] Swelling of the gum of the lower jaw,¹⁹.—**Tongue.** Swelling of the tongue,³⁸.—*Dryness of the tongue,³⁶.—*Tongue cold,⁴².—Burning on the tongue and in the throat,¹⁷.—Sharp burning on the tip of the tongue,³³.—Stinging and burning of the tongue,³³.—**General Mouth.** Frothing from the mouth,¹.—Running of mucus from the mouth towards noon,¹⁹.—Inflammation of the mouth internally,¹⁹.—[290.] Great secretion of mucus in the mouth, fauces, and throat, large lumps of mucus were expectorated without cough every minute (fourth day); constant mucus in the mouth and throat after eating (fifth day); constant spitting of mucus, for more than half an hour, with cold hands, in the evening after a glass of wine (fifth day),³⁴.—Tenacious mucus on the palate and in the mouth, which could scarcely be loosened, increased after drinking water (second day); (loosened and expectorated after a glass of water), (third day),^{34b}.—*Mouth dry and sticky, without special thirst,⁶.—*Extremely distressing sensation of dryness in the mouth and stickiness, for an hour in the morning, after waking and rising, without thirst, only slightly relieved after rinsing the mouth (after twenty hours),⁵.—Dryness and stickiness in the mouth, alternating with watering of the mouth (after twenty-four hours),⁵.—*Dryness of the mouth, palate, and thirst for water,².—Warm sensation posteriorly in the mouth and fauces,³.—Burning in the mouth as if rubbed with pepper, though it was not dry (after one hour),⁵.—Burning heat in the mouth, especially in the fauces and pharynx (first day),^{34c}.—Sensation of cooling with burning and sticking in the mouth and tip of the tongue,³³.—[300.] Pain in the mouth, followed by violent inflammation, and at last a very red swollen tongue, preceded by nausea,¹⁹.—Numb sensation on the palate, as if a burnt spot had healed and become covered with a thick skin, or as if the palate were covered with the skin of a plum,¹.—Mouth seemed sore,³⁸.—**Saliva.** Salivation,¹⁹.—Saliva salt (second day),^{34b}.—*Much tasteless water collects in the mouth,⁵.—Salivation increases,

with an acrid, salt taste in the mouth and on the tongue, and great heat in the palms of the hands and pit of the stomach.¹⁹.—***Uninterrupted running of saliva from the mouth, like waterbrash**,¹.—Tenacious salivation,¹⁹.—*Tasteless saliva, tastelessness in the mouth*,¹.—[310.] **Much saliva in the mouth for several hours together*,³³.—**Taste**. **A biting taste as of peppermint in the throat, with a sensation of rising heat from the pharynx into the mouth, which persisted and became associated with qualmish nausea*,¹.—(Constant sour taste in the mouth, with collection of much watery saliva),¹.—**Taste and coolness in the mouth and throat as from peppermint*,¹.—Foul, herby taste in the mouth, almost like pestwurz (after three hours),¹.†—Foul taste as of dung in the mouth,¹.—*Diminished taste; a pasty taste in the mouth* (after a quarter of an hour),¹.—**Speech**. Stammering,¹³.‡—*Is unable to talk*,¹.—Loss of speech,²⁷.

Throat.—[320.] Tenacious mucus in the throat (fourth day),³⁴.—Throat somewhat swollen,⁴⁷.—Paroxysmal constriction and choking in the throat as if one had eaten unripe pears,¹.—Contraction of the throat as if caused by the pressure of a swelling,¹.—Violent pains in the throat,⁴⁹.—Pressure in the throat and œsophagus, as far down as the stomach, with burning stinging in the pharynx (fifth day),^{34b}.—Drawing and pressure in the left side of the throat,⁵.—Drawing pain in the throat, thirst and colic,¹⁹.—Dryness of the throat, which can not be relieved by drink (after six hours),¹.—**Throat dry and burning* (fifth day),^{34b}.—[330.] ***Scraping in the throat**,¹.³³.—Scraping in the throat like catarrh,¹.—**Roughness in the throat*,¹.—**Burning in the throat*,¹ ¹⁰ ⁴⁷.—Burning in the throat and stomach,³⁷.—Burning in the throat and tongue,³³.—Burning scraping in the throat,³³.—Violent burning in the throat, œsophagus, and stomach,³⁵.—Extreme burning in the throat, œsophagus, and stomach (after half an hour),⁴³.—Violent burning in the throat and stomach,³⁶.—**Fauces and Pharynx**. [340.] Secretion of mucus in the fauces, but with a sensation of dryness and heat (third day),³⁴.—Distension of the pharynx,²⁶.§—Redness of the pharynx with some swelling of the tonsils,⁴⁹.—Burning in the pharynx and stomach,³³.—Sensation of warmth in the pharynx and upper abdomen,¹⁹.—A coldness comes up into the pharynx (but a spot far back on the palate is also cold), followed by a large amount of warm, sweetish, salt-tasting, slimy liquid, rising up like waterbrash, when the coldness in the throat and palate is relieved for the moment, but returns (after twenty-four hours),⁵.—**Œsophagus**. Distension of the œsophagus, with a feeling as if he would suffocate,¹⁷.||—**Swallowing**. Swallowing impossible,⁴⁷.—**External Throat**. The left submaxillary glands swollen, associated with a sore throat internally, especially in the left side, with a kind of choking and constriction in the throat on swallowing, which lasts a short time after swallowing (after one hour),².—Pain in the submaxillary glands as if pinched (after three hours),¹.

Stomach.—**Appetite and Thirst**. [350.] Ravenous appetite without thirst,¹⁹.¶—Ravenous hunger,¹⁹.††—**Hunger and thirst with profuse flow of urine*,¹⁹.—***Violent hunger**, as on the previous days (sixth day),³⁴.—***Feeling of hunger in the stomach, with undisturbed appetite** (eighth

† Tussilago petasites.—HAHNEMANN.

‡ Insert "temporary."—HUGHES.

§ Not found.—HUGHES.

|| Render "Schlundes" œsophagus (on page 91 of same author is "Guttur," that is, throat).—HUGHES.

¶ Greiding adds "unersättlich" (insatiable)—HUGHES.

†† Not found.—HUGHES.

day),^{34b}.—***He eats much, but still complains of hunger and emptiness in the stomach,**¹⁹.—***Desire for eating and drinking with the diarrhoea,**¹⁹.—***Longing for only cold food, herring, sardines, fruit,**².—***Appetite for fruit,**¹.—Constant very greedy desire for gherkins.⁴.—[360.] **Desire for citric acid,**¹.—***Desire for acid things,**¹.—***No desire for warm food, at noon, but more for fruit,**².—No appetite and no hunger; when eating nothing is relished.⁵.—Little appetite; nausea when eating (fifth day),^{34a}.—Aversion to warm food, and on eating it he did not relish it, though he had not eaten for a long time; yet desire for fruit.¹.—***Excessive thirst,**^{48 49}.—***Excessive thirst during the perspiration,**¹⁹.—***Much thirst for cold drinks, immediately,**⁴.—Much thirst in the afternoon and evening.².—[370.] ***Great thirst with hunger,**¹⁹.—**Eruptions.** Eruptions of gas,³³.—***Violent eruptions, mostly of air (after six hours and three-quarters),**⁵.—Frequent eruptions (fifth day),^{34b}.—Sour eruptions.⁴⁹.—(Eruptions even while fasting; sour eruptions in the afternoon).¹.—Eruptions of wind frequently repeated after eating, with pressure in the stomach and tension of the whole upper abdomen (third day),¹⁴.—Eruptions of odorless flatus (first day).^{34b}.—Eruptions after breakfast, chilliness and weakness (eighth day),^{34b}.—Bitter eruptions.¹.—[380.] (Eruptions tasting of the food).¹.—Constant qualmish eruptions with terrific cough,¹⁹.—Empty eruptions of gas after eating.⁶.—***Empty eruptions, immediately,**¹.—Empty eruptions in the evening after lying down in bed, followed by a scraping, scratching sensation in the larynx, almost as after heartburn (after twelve hours).¹.—Frequent efforts to eructate.¹⁹.—***Hiccough.** ***Hiccough,**^{1 25 30}.—Hiccough in the morning with the customary smoke (after twenty-four hours).¹.—Hiccough, for half an hour.¹⁷.—Long-continued hiccough.¹⁹.—[390.] A large amount of water suddenly comes into the throat (water-brush), he cannot swallow it quickly enough and it gets into the air-passages, and frequently chokes him (after twelve hours and a half).³.—Cardialgia.²⁶.—**Nausea and Vomiting.** ***Nausea,**^{30 33 36}.—***Nausea, with great thirst, and flow of urine for three days,**¹⁹.—***Nausea, with weakness, so that he was obliged to lie down (fifth day),**^{34a}.—***Nausea, followed by violent and frequent vomiting (after half an hour); constant and bloody vomiting (after one hour),**⁴³.—Nausea, pressure, and heaviness in the stomach after eating a little,^{34e}.—Nausea, with hunger and pressure in the epigastric region while eating, disappearing immediately after eating.¹.—***Great nausea before vomiting,**¹.—***Great nausea, with profuse salivation,**¹⁹.—[400.] Great nausea, with red sweaty face,¹⁹.—***Constant nausea and salivation, with great appetite and thirst,**¹⁹.—***Qualmishness, with a bilious taste in the mouth,**¹.—Qualmishness arose from the breakfast, which disappeared after eating meat, at noon (after twelve hours).¹.—Qualmishness with closure of the jaws.¹⁹.—Qualmishness in the pit of the stomach.⁵.—***Qualmishness with frothing from the mouth,**¹⁹.—Qualmishness and hoarseness, much cough.¹⁹.—***Qualmishness and salivation, with closure of the jaws,**¹⁹.—Excessive qualmishness, with great thirst.¹⁹.—[410.] Very qualmish, he would gladly have eaten something but had no appetite.⁵.—Sick and weak (first day),^{34a}.—Nausea after dinner (second day); nausea and crawling in the stomach (fifth day),^{34b}.—Feels very sick and weak after a short walk.^{34d}.—Excessive inclination to vomit, even to faintness.¹⁹.—***Vomiting,**^{19 25 30}; immediately.^{21 40 48}.—***Violent vomiting of a slimy acid liquid with food, with painful distortion of the face,**⁴⁷.—***Forcible excessive vomiting,**^{14 15 22 23 31}.—Attacked with violent and incessant vomiting, and lived only from morning till night.³⁹.—***Vomiting and diarrhoea as many as ten times, with pale sunken face, covered with cold**

sweat (after six hours),⁴⁶.—[420.] If there be vomiting the strength and pulse sink,⁴⁵.—Two paroxysms of vomiting, in each of which he vomited three or four times; the nausea continued even in the interval of a quarter of an hour between the paroxysms; the ejecta had a sour smell,¹.†—Long-continued vomiting,⁴⁵.—***Vomiting of food**,¹⁹.—***Violent vomiting**,⁴⁵.—**Even at the beginning of the vomiting he was obliged to lie down, and at its close he was so exhausted that it seemed as though the thighs would separate from the hip-joints*,¹.—Before vomiting cold hands, after the vomiting hot hands, with orgasm of blood,¹⁹.—**Vomiting of food with green mucus*,¹⁹.—Vomiting of all food and long sleep,¹⁹.—Vomiting of food with mucus and green substances,¹⁹.—[430.] Vomiting, with heat of the body,¹⁹.—Nightly vomiting of very tenacious mucus,¹⁹.—**Vomiting of mucus, and cold sweats*,⁴¹.—**Green vomiting*,⁴⁹.—***Vomiting of green mucus**,^{19 35 38 42}.—Profuse throwing off of mucus, with frequent eructations,¹⁹.—Vomiting of green mucus, and afterwards of much froth,¹⁹.—Vomiting at first of froth, afterwards of yellowish-green, sour-smelling mucus,¹⁹.—Vomiting of green mucus, followed by chilliness,¹⁹.—Vomiting of black-green mucus,¹⁹.—[440.] Vomiting of dark-green mucus with diarrhoea, and yet appetite for eating and drinking,¹⁹.—Vomiting of white mucus, at night,¹⁹.—Vomiting of white mucus, with good appetite,¹⁹.—Vomiting of much mucus, with extreme weakness,¹⁹.—Vomiting, at first of bile and mucus, afterwards of black bile, at last of blood,⁵.—Vomiting at first of bile, then of very tenacious mucus,¹.—Vomiting of bitter, sour, brown mucus with food, two hours after coffee, in the evening (third day),³⁴.—[Black vomit],^{8, †}.—***Stomach**.—**Painful distension of the pit of the stomach*,⁴³.—(Sensation of weakness in the stomach, with internal coldness in the epigastric region, and slight pressure),¹.—[450.] Fullness in the stomach after eating a little (third day),³⁴.—Pains in the stomach,⁴⁹.—**Pains in the stomach and bowels*,²³.—**Acute pain in the epigastrium*,⁴⁸.—**Pain in the stomach, as from ravenous hunger*,¹.—Complained of stomachache, but eats, drinks, and sleeps much,¹⁹.—Pressing and drawing pains in the pit of the stomach,¹.—**Violent pressure in the pit of the stomach, which extends into the sternum, the hypochondriac region, and as far as the ilia* (after eight hours),¹.—Pressure in the stomach after dinner (sixth day),³⁴.—Pressure in the pit of the stomach,¹⁹.§—[460.] Burning in the stomach,³³.—Heat and burning in the stomach, throat, and tongue, together with a sensation of coldness in the mouth, as from peppermint drops,³³.—A burning pressure in the pit of the stomach and middle of the chest, with cramp in the stomach, and eructations after breakfast (sixth day),³⁴.—Burning (*incendium*) in the epigastric region,²⁵.—Burning sensation in the stomach in the evening, and in the chest, like heartburn, with cold shivering over the back,³⁴.—Burning in the epigastrium and along the œsophagus,⁴⁶.—Pinching pain in the pit of the stomach, more when walking,¹.

Abdomen.—Hypochondria. Tensive pain in the hypochondria, as from flatulence,¹.—Pain in the hypochondria and in the chest, on account of the non-emission of flatus,¹.—Sticking in the region of the spleen while walking, after a moderate meal (after twenty-four hours),¹.—***Umbilicus**. [470.] Colic in the umbilical region,¹⁹.—Colic in the umbilical

† The vomiting was relieved by drinking cold milk, but there followed in bed an astonishing chill.—HAHNEMANN.

‡ When administered to maniacs and melancholics.—HUGHES.

§ "Magendruckten" is the original.—HUGHES.

region, before pains in the back,^{19,†}—Cutting pains in the umbilical region, increased flow of urine and thirst,¹⁹.—**Colic about the navel, as from flatus, without marked tension of the abdomen or pain when touched* (after six hours),⁵.—**General Abdomen.** **Distension of the abdomen*,^{26,34d}.—Distension of the abdomen, with salivation,¹⁹.—Swelling of the abdomen, with colic and emission of flatus,¹⁹.—Rumbling in the abdomen (first day),³⁴.—**Loud rumbling in the abdomen,¹⁹.—**Loud rumbling in the abdomen, with diuresis,¹⁹.—[480.] Painless rumbling in the abdomen, as from flatus (after three-quarters of an hour),⁵.—Flatulent rumbling and griping in the abdomen, infrequent and scanty emission of flatus,⁵.—Rumbling in the abdomen, as if he would have diarrhœa, with frequent emission of flatus (after six hours),⁶.—Emission of flatus (after seven hours),⁵.—Frequent emission of flatus (first hour),¹.—Frequent emission of odorless flatus (first day),^{34b}.—An unusual amount of flatulence, in the evening (second day),³⁴.—Emission of much odorless flatus, with noise, at night (third day),³⁴.—Flatulence after dinner (fourth day),³⁴.—Emission of flatus, after dinner, unnoticed, with a thin stool; afterwards diarrhœa, of acrid fœces, with tenesmus (after one hour),¹.—[490.] Flatus passes upward and downward with violence,¹.—Pain here and there in the abdomen, as if it were cut with knives, immediately,¹.—Twitching in the abdominal muscles, with a not disagreeable warmth in the chest (after half an hour),¹.—The intestines are sore, as if bruised, because the flatus refuses to pass,¹.—The patient complained of terrible pains in the abdomen,⁴³.—Pressing in the intestines,^{34d}.—Painful pressure in the caecal region, as from spasmodic incarcerated flatus (after one hour),¹.—Drawing pressing colic in the evening, while walking,³.—Feeling of drawing in the intestines, as from a purge (first day),^{34b}.—Drawing-tearing pains for minutes deep in the lower abdomen, mostly above the pubis (after one hour),¹.—[500.] **Twisting in the abdomen and back, preceded by great weakness, before the stool; after the stool he felt easier and more vigorous*,¹.—Griping in the abdomen, as in diarrhœa, though without desire for stool (after two hours),⁶.—Drawing griping colic, followed by emission of flatus and evacuation of tenacious fœces, which greatly adhered to the rectum,³.—**Griping in the abdomen, at times above, at times below the navel, in the afternoon, soon after eating, which while standing changes to another place than while walking, and the reverse*,².—***Colic, with a feeling as if the intestines were twisted into a knot**,³⁸.—Colic, thirst, increased flow of urine,¹⁹.—Colic, from the back towards the navel,¹⁹.—Colic, with loud rumbling,¹⁹.—Sudden colic (griping?) in the morning in bed, after waking, immediately followed by desire for stool; an evacuation of yellowish-green, pasty fœces, the last part of which consisted of mucus; the desire continued even after the evacuation, after which almost clear mucus followed; there remained in the intestines above the pubes a feeling as if they had been beaten, and there was an unsettled feeling in the pit of the stomach (after twenty hours),⁵.—**Flatulent colic, which involves the intestines and whole abdomen, here and there; the longer delayed the emission of flatus the more difficult it is to pass** (after six to twelve hours),¹.—[510.] Nightly colic, with sleeplessness,¹⁹.—Dull colic, from distension of the abdomen by flatus, as if there were constipation, with uneasiness,¹.—In part sticking colic, in part sticking pains here and there in the body, with peppery biting in the throat,¹⁰.—***Cutting pain in the abdomen** (after twelve hours),¹.—**Cutting colic, with diarrhœa, very*****

† "After," should be "before."—HUGHES.

early in the morning (about 4 o'clock),¹.—A stitch extending from the abdomen through the abdominal ring along the spermatic cord, when coughing (after three hours),¹.—Frequent sensation in the abdomen as if diarrhœa would come on, without desire for stool,¹ but only a qualmishness and rumbling in the abdomen,⁵.—***Hypogastrium and Iliac Region.*** *Cutting-sticking pain in the lower abdomen, soon after eating* (after twenty-nine hours),³.—Pressing dull pain as from a bruise in the viscera, in the pubic region, all the morning, together with a sensation in the left groin, as if a hernia would form, mostly while sitting,⁵.—Sensation low down in the abdomen, as of impending faintness, before stool,¹.—[520.] Protrusion of an inguinal hernia,¹.—Violent and painful protrusion of the intestines; an unusual hernia protrudes, with rumbling of flatus (third day),³⁴.—Symptoms as if a hernia would become incarcerated,¹.

Rectum and Anus.—Blind hæmorrhoids (after ten hours),¹.—Tenesmus of the rectum,⁴⁶.—Pressure towards the anus, with blind hæmorrhoids,¹.—Burning in the anus during stool (after twelve hours),^{1 19}.—(Smarting pain in the anus),⁵.—Desire for and urging to stool in the upper abdomen, but a stool follows with difficulty or not at all, apparently on account of inactivity of the rectum and absence of peristaltic action of the other intestines (after four and fifteen hours),¹.

Stool.—Diarrhœa. *Diarrhœa,^{22 40 48 49}.—[530.] Diarrhœa in the evening (after milk), (eighth day),^{34a}.—*Diarrhœa, with profuse perspiration,¹⁹.—*Frequent and violent diarrhœa,⁹.—Diarrhœa, with pain during and after the stool,¹.—*Very profuse and painful diarrhœa,²¹.—Diarrhœic stool (after twelve hours),².—Violent bloody diarrhœa,^{12 14}.—*Excessive evacuations,²⁷.—*Copious evacuations,⁴⁵.—*Sudden involuntary watery evacuations of the bowels,⁴¹.—[540.] After the emission of flatus some thin fæces pass unnoticed (after four and sixteen hours),¹.—Frequent sudden soft stools (the first hours),¹.—Stool soft, scanty, brownish yellow (second day),^{34b}. Stools much too soft,⁴.—Frequent black bloody evacuations by vomiting and stool,⁴⁸.—Dry stool in the evening (third day),³⁴.—Bloody stools,⁴⁴.—Fæces acrid (after twelve hours),¹.—Stool, the first part of which was large, the latter part consisting of thin strings of pieces of the normal consistence and color,⁵.—Stool very indolent,³³.—***Constipation.*** [550.] Constipation (first day),^{6 60}.—Obstinate constipation,¹⁹.†—Constipation, with heat and pain in the head,¹⁹.—*Constipation on account of the hardness and large size of the evacuation (after three and fourteen hours),¹.—All the evacuations are suppressed,^{1 †}.

Urinary Organs.—Tenesmus of the bladder,^{35 36}.—Pressing pain in the bladder and burning while urinating,¹⁹.§—Pain in the urethra, as if contracted, behind the glans penis, associated with ineffectual desire to urinate since the bladder was empty (after twenty-four hours),¹.—Pinching pain in the urethra, when not urinating,¹.—Burning of the urine,¹.—[560.] Burning in the forepart of the urethra, while urinating (after three hours),⁶.—Itching of the orifice of the urethra after urinating,¹.—Desire to urinate, with somewhat difficult emission of pale watery urine in a weak stream (second day),^{34b}.—Frequent desire to urinate; urine at first retained, after fifteen seconds discharge of watery urine, with smarting pain in the forepart of the meatus (fourth day),^{34b}.—Involuntary micturition,¹⁹.—*Diuresis,²⁰.—Diuresis with the constipation,¹⁹.||—Diuresis, with violent coryza,¹⁹.—Dys-

† Not found.—HUGHES.

‡ For several days after too large a dose.—HAHNEMANN.

§ Not found.—HUGHES.

|| Not found.—HUGHES.

uria (second day),⁴³.—Urine colorless like water (third day),^{34b}.—[570.] Urine scanty, yellow, and turbid even when passed (after twenty-four hours),¹.—Urine acid,¹.

Sexual Organs.—Male. Acute sensation and sensitiveness in the sexual organs (after twelve and fifteen hours),¹.—Stiffness of the penis,¹.—Soreness of the prepuce,¹.—Drawing pain in the testicles,¹.—**Female.** Abortion,⁴⁴.—Pimples on the right labia previous to the menses,¹⁹.—Flooding, irrestrainable,⁴⁴.—**Profuse menstruation*,¹⁹.—[580.] **Menses appeared much too early*, indeed on the thirteenth and ninth days,¹⁹.—The menses, which had been suppressed for a long time returned at the full moon,¹.—Menses suppressed for many years reappeared,¹⁹.—Roaring in the ears, pains in all the limbs, and great thirst during the menses,¹⁹.†

Respiratory Organs.—Larynx and Trachea. **Spasmodic contraction of the glottis, with contracted pupils*,¹.—**Paroxysms of constriction of the glottis, attacks of suffocation*, with protruding eyes (after half an hour),¹.—Constriction of the larynx,^{23, 32}.—Suffocative constriction in the larynx,^{23, 32}.—**Tickling very low down in the trachea provoking cough, without expectoration* (after one and five hours),¹.—Tickling very low down in the trachea provoking cough, without expectoration (after twenty-four hours),¹.—**Voice.** [590.] Complete loss of voice,⁴³.—**Cough and Expectoration.** **Violent cough for three hours, in the evening, with salivation*,¹⁹.—**Dry cough* (fifth day),^{34a}.—Dry biting cough, with shivering, especially in the evening (second day),^{34a}.—Dry cough, with tickling in the pharynx (third day),³⁰.—Dry hacking cough caused by tickling in the lowest portion of the sternum, immediately,¹.—Violent dry cough, at night and in the morning,¹⁹.—Hoarse, dry cough, at night,¹⁹.—***Hollow cough in long shocks, with cutting pain in the abdomen** (after six hours),².—***Deep hollow cough, always in three or four shocks**, which seem to come from the abdomen, in the evening,².—[600.] **Cough and much expectoration, with blueness of the face and involuntary micturition*,¹⁹.†—Frequent expectoration after the dry cough,¹⁹.—**Respiration.** **His breath leaves him*,^{1, 15}.—**Shortness of breath on the slightest movement, even in the house* (a kind of oppression of the chest), which is only relieved if he sits still and quiet,¹.—**Respiration weak, interrupted*,³⁶.—**Extremely difficult and distressing respiration*,³.—***They seem in danger of suffocation, the respiration is so restricted**,²⁸.—Respiration unnoticed, almost lost,¹.—**Dyspnea*,⁴³.—At times respiration stopped for several minutes, was spasmodic and rattling,³⁵.

Chest.—[610.] Catarrh in the chest, without a real (involuntary) cough; the tenacious mucus must be raised by hawking (after eight hours),¹.—Oppression of the chest following a burning in the throat and a gnawing pain in the stomach,¹⁰.—Much oppression of the chest, and on breathing a pain in the side, especially in the morning on rising (after five days),¹.—**Oppression upon the chest when coughing*,¹.—Tightness of the chest, he cannot inspire sufficient air on account of contraction of the air-passages by tenacious firm mucus (after four hours and a half),³.—***Tightness of the chest and difficult respiration, even while sitting, together with headache**,².—**Tightness of the chest, and pressure in it like a fullness while walking, so that his breath fails*,³.—Such great fulness in the chest that he constantly tries to eructate, without nausea,³.—**Constriction of the chest* (after one hour),⁴³.—**Painful constriction of the chest*,¹.—[620.] Spasmodic contraction of the intercostal muscles towards the left side, which impedes

† Not found.—HUGHES.

† Revised by Hughes.

respiration (after three hours),¹.—**Pressure upon the chest* (tenth day),^{34a}.—Soft pressure upon the chest while standing, with tightness of the chest (after eleven hours and a half),³.—Pressure and heaviness in the chest and stomach,^{34c}.—Pain in the chest, with dry cough.¹⁹.—Frequently recurring pains in the chest,¹⁹.—Pain in all the ribs,¹⁹.—Pain beneath the ribs, especially on expiration,¹.—Cutting pain in the chest (after fifteen hours),¹.—*Tickling in the chest, as if it would provoke cough*, in the middle of the sternum (after half an hour, and one hour),².—**Front and Sides.** [630.] Pressure in the region of the sternum (after two hours),¹.—**A pressing pain in the region of the sternum, after eating and drinking*,¹.—A painful rhythmical pressure on the upper part of the sternum,².—Pinching pain in the region of the sternum, more after drinking than after eating,¹.—Constrictive pain like cramp in the left side of the chest, recurring periodically (immediately),¹.—Pain in the sides and headache, with an almost dry cough,¹⁹.—Pains in the side, with pains in the epigastric region,¹⁹.—Pain in the sides, breasts, and in the thighs,¹⁹.—Gripping pain in the right side of the chest (after twenty hours),⁴.—Pain in the left side of the chest, then in the back,¹⁹.—[640.] Pain in the left side, with cough, with weakness and difficult respiration,¹⁹.—Pulselike pressure as with a dull point in the left side of the chest and region of the fourth rib; the spot was painfully sore to touch, as if suppurating,³.—During the day some paroxysms of stinging pain in the right side of the chest which took away the breath,¹.—Stitches in the right side,¹⁹.—A stitch ending with pressure beneath the last right ribs, worse on inspiration (after twenty-four hours),¹.—A fine stinging-throbbing pain in a small spot in the left chest (after five hours),¹.—Slow sharp stitches near the nipples; which at last itch,³.

Heart and Pulse.—**Præcordia.** Cutting pain in the præcordial region (first night),³⁴.—Pressure at the heart,¹.—Paroxysmal anxiety at the heart, which then beats very violently, and with a sensation as if it were very warm (after four hours),⁶.—**Heart's Action.** [650.] **Palpitation, with anxiety, and rapid audible respiration*,².—**Violent beating of the heart, which moves the ribs; the heart beats very forcibly and moves the hand, without pain*,¹.—**Pulse.** **Pulse very rapid* (after six hours),⁴⁶.—Pulse of the normal rate, but very weak and almost imperceptible (after eight hours),².—**Very slow pulse*,³³.—Pulse very slow, even while walking,³³.—**Pulse very slow and almost lost* (after four, and several hours),¹.—Pulse small, tense, 36,⁴⁷.—**Pulse very small, irregular, at times intermittent*,⁴³.—Pulse almost lost,³¹.—[660.] **Pulse imperceptible*,^{27 42}.—Pulse entirely lost for several hours,³⁵.

Neck and Back.—**Neck.** Stiffness of the nape of the neck,³³.—Rheumatic stiffness of the nape of the neck, which causes vertigo, especially on moving,¹.—Painful stiffness of the nape of the neck during the headache,⁵.—Tension and sticking in the nape of the neck, on both shoulders and between the shoulders, aggravated by motion and by turning around (third day),³⁴.—Tension and tearing in the right side of the neck, which is drawn, bent, and painful on motion, less on pressure (sixth day),³⁴.—Tension in the nape of the neck (eighth day),^{34b}.—Heaviness in the nape of the neck; the cervical muscles no longer support the head,¹.—Pain in the neck externally, as if the skin were sore,¹.—[670.] Pains in the nape of the neck and shoulder, on waking in the morning (fourth day),³⁴.—**The muscles of the nape of the neck seem paralyzed*,¹.—Tearing pain and tension in the nape of the neck and occiput,^{34c}.—Sticking in the four cervical vertebrae (fifth day),³⁴.—**Back.** Painful stiffness in the back (fifth

day),^{34a}.—Pain in the back, pressing-painful, and as if broken, on stooping and on rising up, in the morning,³.—The spine is painful while walking, and afterwards a drawing pressure as if bruised; this pain disappears on pressure (after eleven hour),³.—Burning and stinging in the back (fifth day),^{34b}.—Burning sticking in the back, and tension in the small of the back (first day),^{34b}.—Burning and pressing sticking in the back and small of the back (first day),^{34b}.—**Scapular.** [680.] Violent pressure as if bruised and beaten in the scapulae.¹.—Pain in the scapulae, extending over the whole back, with diuresis, thirst, and constipation,¹⁹.—Pain between the scapulae, even while sitting; on turning the pain becomes a decided tearing,¹.—*A perceptible rheumatic pain between the scapulae, and extending from the nape of the neck to the small of the back*, which is especially distressing on going to stool,¹.—Burning in the region of the scapulae,¹⁷.—**Lumbar.** Pains in the loins,¹⁹.—Pain in the small of the back, shoulder, and back, with sticking and tension (second day),^{34a}.—The left side of the small of the back is painful as if beaten, on stooping, as well as on rising up,³.—Pain in the small of the back, while walking upon a level, not while sitting, in the morning,¹.—Tensive pain in the small of the back (fifth day),³⁴.—[690.] A paralytic and bruised pain in the joints of the small of the back and knee, on moving after rising from a seat,¹.—A pressing pain in the small of the back, while standing,¹.—A stitch in the small of the back on stooping, which continues a long time,¹.—Pains in the loins and arthritic tearing pains in the lower limbs,¹⁹.—Intermittent stitches in the coccyx while standing, rather itching than sticking,³.

Extremities.—³**Nails blue on account of the coldness,**³³.—^{*}*Paralysis of the limbs,*³⁷.—[Twitching of the limbs and profuse perspiration, followed by headache, vertigo, and much drinking],¹⁹.†—Trembling in all the limbs, horrible anxiety at the heart, and inclination to faint,⁷.—Stretching (*tensio*) of the limbs,²¹.‡—[700.] **Weakness of all the limbs,**¹.—Weakness, with heaviness of the limbs, increased after breakfast (second day),^{34b}.—Painful lameness as from too long a walk, in the upper and lower extremities, only on motion; he could scarcely get along,¹.—Stiffness of the limbs, especially in the forenoon and after standing,¹.—Insensibility and rigidity of the limbs,³⁶.—^{*}*Falling asleep of the limbs,*¹.—The arms and feet always fall asleep, even while lying (after eight hours),⁶.—Electric-like shocks, followed by bruised pain in the knees and elbows,¹.—(Pain in the limbs upon which he lies, as if the bed were stony hard),¹.—^{*}*Pain in all the limbs as if exhausted by excessive fatigue,*¹.—[710.] Drawing pain in the limbs,¹.—Violent drawing pain in the limbs when walking, which disappears at night on continuing to walk,¹.—Spasmodic drawing in the limbs, above the joints, on moving,³.—Tearing pains in the extensor muscles while sitting,¹.

Superior Extremities.—Trembling of the arm when she takes hold of anything with the hand,¹.—[Twitching in both arms],¹⁹.§—The arms were painfully lame, as if beaten, he could raise and hold them up only with effort and with pain,¹.—Right arm painful as if beaten, after a little effort (first day),^{34b}.—Paralytic feeling in the right arm (second night),^{34b}.—Drawing and stiffness in the muscles of the left arm,³³.—[720.] Sensation as if the arm were too full and swollen,¹.—Numbness of the right arm,³³.—Numb sensation in the right arm, with heaviness,³³.—Constant numbness of the left arm, with pain and stiffness of the muscles,³³.—**Shoulder.** Stiffness of the shoulder and pain in the nape of the neck,

† Bracket.—HUGHES.

‡ With S 104.—HUGHES.

§ Bracket.—HUGHES.

in the morning (fifth day).³⁴.—Pressure in the shoulders.³³.—Pain in the shoulder (fourth day).^{34a}.—Slight indescribable pain in the right axilla.⁵.—Constant pain in the right shoulder-joint.³³.—Pain in both shoulders (first day).^{34b}.—[730.] The pains in the shoulders and arms continue for several days during rainy weather, cease with the rain, after a dose of Rhus, and on the appearance of warm weather all the symptoms cease (after twelve days).^{34b}.—Sensation of pain like lightning, extending from the shoulder to the head, followed by loss of vision.³⁷.—A cutting pain like a single cut on the shoulder.¹.—Sticking and tensive pain in the right shoulder; the sticking is at first slight but increases from minute to minute, extending from the shoulder to the back, impeding movement, even respiration is painful; the most violent pain in the shoulder is relieved by pressure of the hand; after this pressure is removed there is a burning in the skin; the pain in the shoulder is aggravated by hawking and coughing; sticking in the right shoulder and neck, with stiffness of the nape of the neck (second day).³⁴.—Violent sticking and tearing in the right shoulder, neck, and occiput, aggravated by motion, on waking in the morning (sixth day).³⁴.—Sticking in the right axilla, extending to the elbow (first day).^{34b}.—Sticking in the left shoulder-joint (first day).^{34b}.—Sticking in the right shoulder and head (eighth day).^{34b}.—Single stitches in the left shoulder-joint, even during rest (after four hours).⁶.—**Arm.** Pain in the muscles of the right upper arm.³³.—[740.] Pain in the muscles of the left, afterwards of the right upper arm.³³.—Arthritic pain in the deltoid muscle, in the upper arm and in the knee.¹.—Paralytic bruised pain in the left upper arm on stretching it out.¹.—A persistent drawing downward pain in the middle of the left humerus (after half an hour).³.—Smarting on the inner side of the upper arm as from sore flesh (seventh day).^{34b}.—**Elbow.** Drawing pain in the bend of the elbow on flexing it; it seems swollen, on account of which it cannot be completely flexed; together with a paralytic feeling in the arm (after fifteen hours).³.—**Forearm.** Pain in the middle of the left forearm as if the bones were pressed.¹.—**Wrist.** Jerking in the right wrist and farther up towards the elbow.¹.—**Hands.** Crawling in the hands as if they had been asleep.¹.—**Fingers.** Deadness, falling asleep of the fingers (after one hour).¹.—[750.] Fingers insensible, rigid.³⁷.—Tensive pain in the middle finger on moving it (after twenty hours).¹.—Pain, as if dislocated, in the joints of the thumb.¹.—The second phalanx of the finger is painful in the bone when grasping anything (after twenty hours).¹.

Inferior Extremities.—Tottering gait.¹.—Heaviness of the lower extremities.³³.—Great heaviness of the lower extremities.³³.—**Hip.** * Walking very difficult, like paralysis, first in the right, then also in the left hip.¹.—Tensive and pinching pain above both hips and in the loins, while walking and standing, at noon (second day).³⁴.—Cramplike drawing in the upper part of the gluteal muscles while standing.³.—**Thigh.** [760.] Weakness almost only of the thighs and knees.¹.—The thighs and hips give out and ache as if paralyzed.¹.—The thighs are painful as if broken, while sitting (after eight hours).¹.—Rheumatic drawing pain in the muscles of the thigh, while standing (after three hours).³.—Cramplike pressing pain in the thigh or calf if he supports himself less upon that foot while standing (after three hours and a half).³.—Visibly pulsating twitchings of the large external muscles of the thigh while sitting and standing; the muscles rose and fell rhythmically but without pain, immediately recurring after walking (after nine hours).³.—**Knee.** Cracking of the knees.¹.—Single, visible, raising high up of the knee while sitting (in the afternoon), once every

quarter or half hour, without pain; she started up every time; it ceased in the evening after lying down.¹—Bruised pain in the knees on going downstairs (after four hours).¹—Tension in the hollows of the knees, while standing and walking, as if too short.¹—[770.] Drawing at times in the knees, while standing and walking and sitting.¹—Painful jerking in the right knee.¹—Spasmodic drawing upward pain from the hollow of the knee into the right thigh, while standing (after twelve hours).³—A cold smarting sensation externally in the knee-joint.³—Cutting pain, as with a knife, in the knee, transient, like a single cutting.¹—(Sticking in the knee and ankle), (after five days).¹—**Leg.** Pain as from heaviness of the legs, as from weariness.¹—Pain as from heaviness in the leg, as if paralysis were impending, in the morning.¹—Pain in the bone just below the knee, as if it had been broken, and were not perfectly firm, while stepping upon it.¹—Stiffness and pain in the right calf.³³—[780.] *Cramp in the calves.¹—Violent cramp in both calves, in the outer portion, lasting half an hour in the evening, after a fatiguing walk (seventh day).³⁴—Pain in the calves and tibiae as if they would break down.¹—Drawing and stiffness in the calves.³³—Violent tearing in the muscles of the left leg.³³—Crawling in the legs as far up as the knees; a painful surging.¹—Biting itching and crawling sensation in the calves, while standing (after four hours).³—A tearing pain in the tibiae extending downward.¹—Burning in the tibiae, in the evening, as if they had come from too great cold (after fourteen hours).³—**Ankle.** Pressure in the ankles and legs.³³—[790.] Pressure at the ankle, momentarily, as if the bones were directly touched and pressed (after eight days).¹—Violent pressure in the right ankle.³³—The ankles are painful as if sprained, while walking, when previously while sitting the soles of the feet had been stretched far backward, so that they rested upon the backs of the toes, in the evening (after fifteen hours).³—Burning in the malleoli of the ankle.¹—**Foot and Toes.** The feet suddenly swell, and then after a few hours become again thin.¹—While walking he feels a clumsiness and heaviness in the feet and knees.⁵—Pain in the feet, especially in the knees, as from great fatigue, as if large stones were tied upon them; in order to obtain relief he was obliged to move them hither and thither (after forty-eight hours).¹—Painful drawing transversely through the joints in the forepart of the foot, while sitting (after one hour and a half).³—Cramp in the feet (fourth day).^{34a}—Cramplike pain on stretching out the foot (twelfth day).^{34b}—[800.] Violent pressing pain in the right foot as though the root of the foot and metacarpal bone of the little toe were dragged downward; the pain lasted several minutes, during both rest and motion (twelfth day).^{34b}—Awakened as if by a painfully cold wind blowing from both feet to the knees, relieved only after long rubbing, after midnight (second night).³⁴—Jerking in quick succession in the weak foot, while standing, but not while walking (after three days).¹—Violent stitch in a corn on the left foot, while sitting (after fourteen hours).³—Sore pain in a corn when raising the foot, so that he stood only on the toes, in the evening (after fifteen hours).³—Tensive pain in the external tendons of the toes, when walking.¹—Pain in the corns.^{34d}—Stinging pain in the great toe (after five hours).¹—Transient stinging pain in the toes of the right foot, while standing, lasting two hours (after fourteen hours).²—Sticking and burning in the right great toe.^{34d}

Generalities.—[810.] It brings on a new attack of gout.¹—*Cholera,^{15 16 26}—*Trembling of the whole body.¹—*Spasms.⁴⁵—*Spasms, convulsions,^{21 23 25 27 32}—Epileptic spasms.²²—*Chronic weakness.¹—Sleepy weak-

ness in the morning which prevents his rising from bed,¹.—**Attacks of weakness when walking*,³³.—***Weakness, as from too great heat in the air**,¹.—[820.] Weak a long time in the evening on account of mental excitement (first day); weakness (second day); weak and disinclined to work (fourth day); weak feeling as though he had not slept enough, head stupid; on attempting to rise he sank back in bed, overcome by sleep, a dreamy half sleep, with sweat and apprehensive mood (fourth day); weak and heavy, with a dizzy head and inability to work the whole forenoon, better after a glass of wine (seventh day); weakness in the morning (eighth day),³⁴.—Great weakness in the afternoon, and in the evening, so that he went to bed early, followed by fatiguing, dreamy sleep (first day); weak in the evening; all work, especially mental work, is irksome, with great uneasiness, heaviness of the head, which is painful, followed by stupid sleep (second day); great weakness (fourth day); weakness (seventh day),^{34b}.—**Weak and chilly in the morning*,^{34c}.—***Extreme weakness**,^{1, 36 48 49}.—Great weakness, with toothache and inflammation of the tonsils,¹⁹.—**Excessive weakness on going to stool*,¹⁹.—**Extreme weakness*,^{9 30 31}.§—**While lying, his weakness does not disappear*, but all his other symptoms do, and they return only on rising; while sitting they also disappear, and only the headache remains,⁶.—**Weariness*,¹⁷.—Desire to lie down,¹.—[830.] Weariness over the whole body, as if he had walked too far (after two hours),⁵.—Movements slow,¹.—Muscles relaxed,¹.—General loss of power in the body, as if he had not slept enough, with an otherwise active mind, in the morning,³.—***Paralytic sinking of the strength**,¹.—***Rapid sinking of all the forces**, which invites sleep, in the forenoon,¹.—***He sinks down exhausted**,¹.—***Complete muscular prostration**,⁴³.—***Prostration and weariness of the whole body**, especially of the arms and hands, so that it was impossible for him to hold freely in front of him a book which was not at all heavy,².—**Faintness*,^{1 15 23 43 45}.—[840.] Restless (first day),⁵⁴.—Busy restlessness,¹.—Activity and mobility on the diminution of the pains and emotional disturbances,¹.—Sensation in the bones as if they had been beaten (after two hours),¹.—**Pain, consisting of a pressure and bruised sensation in the muscular parts of the body*,¹.—Sensation of itching in the bones,¹.—Transient stitches, here and there, in the body,¹.—He is affected by the open air, it distresses him, as if he were convalescent from an acute illness,¹.

Skin.—**Objective.** ***Whole body and face pale**,⁴³.—Desquamation of the epidermis,²⁹.—[850.] Copper-red eruption on the face, about the mouth and chin,¹⁹.—Collection of painful pimples in various places (tetters),¹.—Red spots on the nose,¹⁹.—Eruption like the itch,¹.—Nettlerash eruption, which itches whenever she is warm, even during the day (only about the joints); after scratching the spots burn and hives appear, as if caused by stinging nettles,¹.—Thick rash on the cheeks, with pain in the face,¹⁹.—Red eruption about the mouth and on the chin,¹⁹.—Eruption of pimples near the corner of the mouth, on the margin of the red, which was painful when not touched, and even more when touched,¹.—Red painless pimples on the backs of the fingers between the second and third joints

† General spasms seem almost never to be produced by Veratrum album, except shortly before death, and to be the result of the great antagonism of nature.—HAHNEMANN.

‡ Iron seems to relieve it.—HAHNEMANN.

§ Smyth says, "especially in the lower extremities."—HUGHES.

|| After slight vomiting and purging.—HUGHES.

(after twenty hours).¹.—(Dry tetter upon the hand between the thumb and index finger).¹.—[860.] A painful pimple on the lower jaw, which when touched causes a constricting pain, but which afterwards develops into a pustule with an inflamed areola.³.—Vesicles close together on the nose.¹⁹.†—Vesicular eruption in the left corner of the mouth.¹⁹.—Burning blisters like anthrax on the left thigh, elevated pustules with depressed tips, with dark-red swollen areola, with tensive pain, when walking, burning (second day); in the blisters on the thigh a burning sticking pain, while walking, though less swollen (fourth day).^{34b}.—*Subjective*. Sensitiveness of the skin, every part upon which he lies is painful (eighth day).^{34b}.—Burning sensation.²⁰.‡—Crawling (creeping) itching on various parts of the face, rather biting than stinging, followed by the appearance of small red pimples, with hard red, elevated margins, and followed by brown tips, filled with yellow pus, which at first were painless, but when fully developed were painfully sore to touch.³.—Crawling on the hands and fingers.¹.—A fine stinging, as from burning nettles, about the throat and on the chest, relieved by stroking with the hand (with redness and elevations of the skin like urticaria, which is noticed only on touch of the hand).¹.—(Itching here and there) (fifth day).^{34b}.—[870.] Corroding itching of the skin (after twelve hours).¹.—Itching here and there on the face and behind the ears, as if pimples would appear (without redness), with sensation of soreness behind the ears (after twenty-three hours).⁶.—Biting itching and crawling beneath the lobule of the right ear.³.—(Itching on the face) (third day).^{34b}.—(Itching on the face, more than usual) (first day).^{34b}.—Itching on the arms and feet, as if an eruption would appear, without redness (after two hours).⁵.—Itching and burning, with shivering on the shoulders, back, face, arms, and fingers (seventh day).^{34b}.—Corroding itching on the inner side of the wrist (after twenty-four hours).¹.—Itching and biting on the left middle finger, on the palmar surface, and on the ball of the thumb, with stinging as from nettles (first day).^{34b}.—Burning-itching pain in the first phalanx of the little finger, as if it had been frozen.¹.—[880.] Violent itching on the legs, on rubbing small painful pimples appear in the skin (fifth day).³⁴.—Itching in the hollows of the knees (fourth day).^{34b}.—An almost burning itching under the left heel, deep internally (after two hours).¹.—Itching on the great toe (first day).^{34b}.

Sleep.—*Sleepiness*. Yawning.¹; (fifth day).^{34b}.—Frequent yawning (first and eighth days).^{34b}.—Much yawning in the morning (third day).³⁴ ^{34c}.—Frequent yawning and lachrymation (third day).^{34b}.—Much yawning and stretching, and weary with sleep in the evening.^{34c}.—Unusual yawning for more than an hour, in the evening.^{34c}.—[890.] Yawning and stretching after the midday nap.⁵.—Yawning, frequently so violent that it causes roaring in the ears.².—Repeated yawning and stretching, with weakness and bruised feeling in the joints, as if he had not slept enough, in the morning.³.—Sleepiness, especially in the afternoon (ninth day).^{34b}.—Sleepy and weak after breakfast (eighth day).^{34c}.—Sleepiness, with frightful starting up, which prevents sleep, followed by a febrile attack.¹.—**Unusual sleepiness*, so great that the head nods; even while making an effort to talk, the lids close and the thoughts vanish, at noon (seventh day).^{34c}.—Falling asleep while reading, in the afternoon (eighth day).^{34c}.—He falls asleep, with partial consciousness, while sitting in a chair.⁶.—Stupefying sleep, a

† The day after S. 852 in same subject.—HUGHES.

‡ From external application.—HUGHES.

waking coma,¹.—[900.] Quiet sleep, with thirst and diuresis,¹⁹.—(Sleep too sound),¹.—Long, uninterrupted sleep,¹⁹.—Long sleep for three days, even during the epileptic spasms,¹⁹.†—While asleep he lies with the arm over the head (first hours),¹.—**Sleeplessness.** Sleeplessness,⁴⁹.—Sleeplessness for several nights,⁴⁸.—Late falling asleep on account of unusually cold feet (first night),³⁴.—He falls asleep late,⁵.—He is unable to fall asleep before midnight, on account of excessive activity of mind, two nights in succession; together with an intolerable sensation of heat in the bed (he desires to uncover), with restless tossing to and fro,⁵.—[910.] Frequent waking from short naps, with pressing pain in the forehead and temples, and heavy head (second night),^{34b}.—(Waking at night, with much chilly trembling of the right arm),¹.—Restlessness at night (ninth day),^{34b},^{34d}.—Restless, dreamy sleep (seventh day),^{34b}.—Sleep restless, from 12 to 3 o'clock, then pain in the shoulder (sixth night),³⁴.—Sleep interrupted by anxiety and emotional disturbances, with complaints that the blood burns in all the veins, especially of the head, and of a spasm rising from the chest to the throat, with special heat of the head and hands; the heat and anxiety disappeared in the open air, and was followed by frequent yawning,¹⁹.—Constant change of position at night, no sleep, though the feet were warm; after awhile the knees began to be cold; about 10 o'clock a drawing in the legs began, followed by cold creeping as from snow-water, from the knees down to the feet, with great restlessness till 3 o'clock; in the morning only two hours of restless sleep (fifth day),³⁴.—Whining during sleep,¹.—**Dreams.** Sleep full of dreams (second day),³⁴; (first, fifth, sixth, and seventh nights),³⁴.—Sleep heavy, dreamy,³⁴.—[920.] Confused dreams at night,^{34c}.—Dreams at night of hunting (fourth day),^{34b}.—Sleep with heavy dreams, with great effort and great anxiety, with perspiration at night (third day),^{34b}.—Vivid anxious dream of robbers; he awoke with fright, and then believed that his dream was a reality,¹.—Fatiguing dreams at night, followed by weakness on waking in the morning, with heaviness of the head and limbs (second day),^{34b}.—Quarrelsome dreams at night,⁶.—Dream that he was violently pursued,¹.—Frightful anxious dreams at night, for example, that a dog was biting him, and he could not get away,².—Frightful dreams, followed by vomiting of a very tenacious green mucus,¹⁹.—Indistinct dreams; he wakes unusually early in the morning,³.

Fever.—Chilliness.—[930.] *Chilliness in the whole body,²⁷.—Chilliness and shivering, in the morning,¹⁹.—Chilliness and shivering the whole day, with drawing pain in the throat and back,¹⁹.—*Chill and shivering with the frequent stools,¹⁹.—Chilliness and heat alternately from time to time, with vertigo, constant anxiety, and qualmishness,¹⁹.—Febrile chill, in the morning, immediately after rising, while dressing,².—*Febrile chill, with coldness and thirst, in the morning for half an hour, without subsequent heat, with weakness of the limbs, especially of the thighs (after twenty-four hours),².—*An internal sensation of chilliness running from the head to the toes of both feet, at the same time with thirst (immediately),².—*Chilliness (fourth day); the whole afternoon (fifth day); all day, with smarting pain in the skin (seventh day); with shivering over the back, shoulders, and arms all day, even in a warm room (eighth day); shivering and chilliness continued (ninth day),^{34b}.—Chilliness in the evening,^{34d}.—[940.] *Coldness of the whole body,¹,³¹.—*Coldness and sensation

† In an epileptic patient.—HAHNEMANN.

of coldness over whole body (after eleven minutes),².—*Creeping coldness through the whole body (soon),².—*Coldness at times, heat with unusual perspiration at other times (sixth hour),⁴⁶.—*Rigidity and coldness of the whole body,³⁵.—*Shivering and gooseflesh after drinking,³.—Shivering, crawling in the skin, for example, of the face (after two hours),¹.—*Shivering over the whole body, always before vomiting,¹.—Unusually sensitive to the air, every draft causing not only shivering but a painful drawing through the back, shoulders, and arms, like a cold wind,^{5, 6}.—Shivering, with a sensation of coldness in the limbs, especially in the shoulders and arms, as if ice-cold air were streaming through the bones, in a warm room,^{34d}.—[950.] *Cold skin,^{42, 47}.—Coldness of the head,³³.—*Feeling of coldness in the head, followed by heat,³³.—*Very frequent creeping coolness over the head, especially over the vertex,³³.—Peculiar feeling of coolness in the head, especially in the forehead,³³.—Chilliness on the crown and at the same time in the feet (after one hour),¹.—*Face cold, collapsed,¹.—*Alternations of coldness and heat in the back,³³.—*Coldness over the back,³³; (fifth day),^{31b}.—Coldness in the back, followed by violent heat in the back,³³.—[960.] *Coldness extending from the back through the shoulders into the arms, several times,³³.—*Constant shivering in the back and through the arms,³.—*Extremities cold,⁴³.—Chilliness in the limbs and drawing pain in them,¹⁹.—Cold hands and feet after breakfast (second day); in the evening (sixth day),³⁴.—Coldness of the hands and feet preventing sleep until 3 A.M.,^{34d}.—Constant painful coldness of the upper extremities (ninth day),^{31b}.—Shivering in the arms and back, with warmth of the lower extremities and feet (second day),^{34b}.—Sensation of coldness in the arms on raising them,¹.—*Great coldness of the hands,^{33, 34b}.—[970.] Woke from sleep (after sleeping quietly for four hours) with cold feet, shivering, and drawing up the legs (first night),³⁴.—Night greatly disturbed by very painful cold feet, frequent waking and changing of the position (fourth day),³⁴.—(In the afternoon took a walk in the melting snow; sensation of coldness and moisture of the feet; in the evening cramplike pain in the feet while walking), (twelfth day),^{34b}.—*Coldness of the feet, as if cold water were running into them, with trembling,¹.—Painful coldness of the soles of both feet, intolerable in the bed, obliging him to rise and walk about, in the evening,^{34c}.—**Heat.** Febrile symptoms,¹.—Fever daily before midnight,¹.—Fever recurring for several days, sometimes lasting a long time,^{1, †}.—Heat and crawling over the whole body, extending into the tips of the fingers and toes,¹⁹.—Heat over the whole body and general perspiration, without thirst, with pale face (after two hours),⁶.—[980.] Internal heat, and yet he refuses drink,^{1b}.—Heat and perspiration, in the evening, in bed, though more heat,¹.—[Burning in the skin beneath the perspiration],^{24, ‡}.—Burning heat of the body (after three hours), followed by a copious perspiration, which lasted five hours (after three hours and a half); the room seemed quite obscure, he could no longer tolerate the daylight, and could not hold up his head, but was obliged to press it against the chest (after six hours),⁴⁶.—Sensation of warmth and cold at the same time on the head, with sensitiveness of the hair,¹.—*Heat of the head,^{33, 41}.—Head hot, dull,³³.—Head hot, confused, and intoxicated,³³.—Heat in the forehead and sinciput, which changes at first to warm, then to persistent cold perspiration on the forehead,¹.—Heat streaming up the back into the occiput,³³.—[990.] *Redness and heat of

† I have noticed it sometimes in the evening, sometimes in the morning.—HAHNEMANN.

‡ Bracket.—HUGHES.

the face, with slight febrile shivering,¹.—Heat and redness of the face (and shivering over the body), in the evening, also in the morning in bed heat in the face,¹.—*Heat and redness of the face*, and heat of the hands, with indifferent mood, caring only for the things just about him, with fearfulness (after one hour),¹.—[Bright heat and redness of the face, with constant laughing],¹⁹.†—**Heat and burning in the cheeks, with redness, with contracted pupils and cold feet* (after ten hours),³.—Sensation of heat, extending from the upper abdomen over the chest to the throat,⁴⁹.—Heat in the back, as if sweat would break out, in the evening, while walking slowly in the open air,⁵.—**Sweat**. Perspiration all over, in the evening, when he wishes to fall asleep,¹.—Very profuse perspiration over the whole body, towards morning,⁴.—Excessive perspiration, with great thirst and good appetite,¹⁹.—[1000.] Persistent profuse perspiration during long sleep,¹⁹.—Easy perspiration on every motion,¹.—Sour perspiration,¹⁹.—Profuse sour perspiration,¹⁹.—***Cold sweat**,^{1 43 45}.—***Cold sweats and vomiting of mucus**,⁴⁴.—**Cold perspirations*,^{26 27} ‡—***Cold perspiration over the whole body**,³¹.—**Cold perspiration breaks out over the whole head and chest*,⁹.§—Perspiration of a bitter odor, towards morning,⁴.—[1010.] Long-continued night-sweat,¹⁹.—***Cold sweat on the forehead**,¹.—***Profuse cold perspiration on the forehead, with the evacuation**,⁷.—**Cold perspiration on the forehead, immediately on rising from a seat*,⁶.—(Perspiration on the face and in the axillæ, when walking),¹.—Some perspiration, especially on the face, in the morning; the face is inclined to perspire even during the day,¹.—Perspiration only on the hands,¹⁹.

Conditions.—**Aggravation.**—(*Morning*), Anxiety; vertigo; during menses, tearing headache; after waking, pressure in crown of head; when smoking, hiccough; in bed, colic; dry cough; oppression of chest; stiffness of nape of neck; on rising, pain in back; on rising from a seat, pain in small of back; pain in legs; chilliness; heat and redness of face.—(*Forenoon*), Stiffness of limbs.—(*Afternoon*), Thirst.—(*Evening*), Anxiety; thirst; while walking, drawing colic; dry cough; heat and redness of face.—(*Night*), Anxiety; colic; before midnight, fever.—(*Open air*), Sticking and burning in eyes; distress.—(*Bending forwards*), Headache from temples to vertex.—(*Coughing*), Sticking in right shoulder; oppression of chest.—(*After dinner*), Anxiety.—(*After drinking*), Pain in region of sternum.—(*Eating*), Soreness of muscles of lower jaw.—(*After eating*), Pain in region of sternum.—(*Expiration*), Pain beneath ribs.—(*Hacking*), Sticking in right shoulder.—(*Inspiration*), Stitch beneath last right ribs.—(*Before menses*), Nosebleed.—(*Motion*), Tension and sticking in nape of neck, shoulders, and occiput; lameness in extremities; drawing in limbs.—(*On rising from a seat*), Vertigo.—(*On rising*), Most symptoms.—(*Sitting erect*), Pressure in vertex.—(*Standing*), Pressure in temples; pain in small of back; stitches in coccyx; stiffness of limbs; pain above hips and in loins; drawing in gluteal muscles; jerking in weak foot.—(*Stooping*), Rush of blood to head; pain in back; pain in small of back.—(*Walking*), Vertigo; pain in spine; pain in small of back.—(*Rainy weather*), Pain in shoulders and arms.

Amelioration.—(*Bending backward*), Headache from temples to vertex.—(*Pressure with hand*), Pain in shoulder.—(*Stooping*), Pressure in temples and vertex.—(*While sitting and lying*), Most symptoms.

† Bracket.—HUGHES.

‡ Reimann says "on the forehead."—HUGHES.

§ Revised by Hughes.

VERATRUM VIRIDE.

Veratrum viride, Ait.

Natural order, Liliaceæ.

Common names, American white hellebore, Indian poke, etc.

Preparation, Tincture of the root. •

Authorities. 1, "W." Bost. Med. and Surg. Journ., vol. x, 1834, p. 216, took 2 grains of extract of root, then 4 grs. (first day); two doses of 3 grains each (second day); 1 a. same, took $\frac{1}{4}$ grain every three hours for three days; 2, Charles Osgood, M.D., Amer. Journ. Med. Sci., vol. xvi, 1835, p. 302, took 2 grains finely pulverized extract at 12 M.; 3, same, a man took 2 grains, afterwards $\frac{1}{4}$ grains; 3 a, same, feeling well the next day, took 5 grains at 7 A.M., 12 M., and 2 grains at 11 P.M.; 3 b, took three or four doses of $\frac{1}{2}$ grain each, at intervals of three hours; 3 c, $\frac{1}{4}$ -grain doses continued for three days, at intervals of three hours; 3 d, $\frac{1}{8}$ -grain doses at same intervals, for three or four days; 4, S. A. Hubbard, Bost. Med. and Surg. Journ., vol. xix, 1838, p. 31, five persons ate Verat. vir., cooked with other vegetables; 5, Cutter, Rickard, and Ingalls, Amer. Journ. Med. Sci., 1861 (2), p. 398, Dr. James Pobbins made a trial; 6, Ephraim Cutter, Med. Times and Gaz. (Mon. Hom. Rev., 1862, p. 494), put 60 minims into syrup gum acaciæ and water, $\frac{1}{2}$ ounce each, took one-seventh at 6.30 P.M., other doses at 7.30 and 10.30 P.M.; 7, Dr. B. Woodward, Med. and Surg. Rep., Phila., Nov. 1860, p. 109 (ibid.), took 8 drops Norwood's tincture at 8 P.M., 4 drops at 10 P.M., and 5 drops at 12 M.; 8, S. W. Abbott, M.D., Bost. Med. and Surg. Journ., 1862 (1), p. 186, four doses of 10 drops of tincture of seeds; 8 a, same, took 20 drops once an hour; 8 b, same, took 7 drops tincture of plant at 2 and 4 P.M., 4 drops at 6 P.M., 6 drops at 8 P.M.; 9, Lancet, 1862 (1), p. 54, a tincture was given for toothache, and a portion accidentally swallowed; 10, G. J. Scattergood, Proc. Amer. Pharm. Assoc., 1862 (Amer. Journ. of Pharm., 1863, p. 77), took 2 grains alcoholic resin at 5.15 P.M.; 11, G. N. Edwards, Med. Times and Gaz., 1863 (1), p. 5, a man took 1 drachm tincture; 12, W. H. Burt, M.D., Hale's New Remedies, p. 1033, in perfect health, took 30 drops of 3d dec. dil. of fluid extract prepared in water at 9.50 A.M., 50 drops at 11 A.M., 60 drops at noon, 100 drops at 2 P.M., 150 drops at 3 P.M., 200 drops at 5 P.M., 175 drops at 7 P.M. (first day); 3 drops fluid extract at 9 A.M., 4 drops at 10 A.M., 5 drops at 12 M., 6 drops at 2 and 4 P.M., 8 drops at 9 P.M. (second day); 10 drops at 9 A.M., 12 drops at 10 A.M. and 12 M., 8 drops at night on retiring (third day); 10 drops at 8 and 10 A.M., and 12 M. (fourth day); 13, same, a girl, aged twenty-one months, took a few drops of tincture; 14, Hale, ibid., a young girl took 20 drops; 15, Jones and Scudder's Mat. Med. (ibid.), took $\frac{1}{4}$ grain alcoholic extract; 16, same, $\frac{1}{2}$ fluid drachm tincture instead of Gelseminum; 17, James Watson, M.D., Edinb. Med. Journ., 1864, p. 616, took 8 drops tincture at 3, 5, and 7 P.M.; 18, Samuel R. Percy, M.D., An Inquiry into the Phys. and Med. Properties of Verat. vir., Phila., 1864, p. 75, in 1823 a farmer boiled 10 pounds of swamp Hellebore in water down to a gallon of fluid, of which his wife took a tumblerful; 19, same, in 1840 a person prepared 2 quarts of syrup from 2 pounds of Verat. vir., and took a tumblerful twice; 20, N. O. Pearson, M.D., Chicago Med. Examiner (ibid.), a patient took 20 minims in an hour and a half, in three doses; 21, Dr. Buckingham, Med. Invest., Dec. 1865, p. 32, H. C., took a swallow of extract; 22, another

man took the same; **23**, J. C. Harris, M.D., Bost. Med. and Surg. Journ., 1865 (1), p. 249, a boy, aged eighteen months, took four or five doses of the tincture, probably not less than 35 drops, death in thirteen hours; **24**, Dr. W. H. Woodbury, Med. Invest., Dec. 1865, p. 27, a man aged forty-five years, as an expectorant, took 20 drops tincture in two doses; **25**, Mr. P. M. Rice, Brit. Journ. of Hom., vol. xxiv, 1866, p. 343, took 20 minims of tincture in 1 ounce of water; **26**, Charles Bullock, Proc. Amgr. Pharm. Assoc., 1867 (Am. Pharm. Journ., 1868, p. 64), took $\frac{1}{2}$ grain resin dissolved in alcohol, every half hour, until 2 grains were taken; **27**, Dr. Hadlock, Med. and Surg. Rep., No. 8, 1870 (Practitioner, vol. iv, 1870, p. 375), effects of large doses; **28**, E. M. Hale, Amer. Obs., vol. vii, 1870; **29**, H. C. Wood, M.D., Amer. Journ. Med. Sci., 1870 (1), p. 51, took 1 grain alcoholic resin at 3.35 and 4.15 P.M., 2 grains at 5.20 P.M.; **30**, same, took $\frac{1}{8}$ grain Viridiæ sulph. in aqueous solution at 11.40 A.M., 12 M., 12.35 and 1.40 P.M., $\frac{1}{9}$ grain at 2.10 and 3.15 P.M., $\frac{1}{4}$ grain at 4 and 4.30 P.M. (31 to 33, E. W. Berridge, North Am. Journ. of Hom., New Series, 2, May, 1872, p. 505); **31**, James Lillie, M.D., dissolved 1 drop of tincture in $1\frac{1}{2}$ pints of water, shook it and took a wineglass at 8.5 P.M., another wineglassful before 9 P.M., another at 10.30 P.M. (first day); same at 8 A.M., 2 glasses at 9.30 A.M., 1 glass at 5 P.M., after dinner (6.45) 3 glasses, at 8.45 P.M. 3 glasses of a dilution made of one wineglassful of the former to $1\frac{1}{2}$ pints of water (second day); 4 wineglasses at 8.15 A.M., 4 glasses of a 3d dil. made as before, at 11 P.M. (third day); 4 glasses at 7 A.M., 5 glasses at 9.30 A.M. (fourth day); 2 glasses before 5 A.M. (fifth day); 4 glasses of a 4th dil. made as before, at 11 A.M. (sixth day); 1 drop of 1st dil. at 11.15 A.M., 3 drops at 10.48 P.M. (twelfth day); 10 or 12 drops of 1st dil. in 2 ounces of water at 8.30 A.M., 6 drops of 1st dil. at 10.57 P.M. (fourteenth day); 12 drops of 1st dil. in $1\frac{1}{2}$ ounces of water, and gradually sipped it in two or three minutes, at 11 P.M. (fifteenth day); 2 or 3 drops of 1st dil. at noon, in evening made 30th dil. from 3d, drank all the intermediate watery dilutions at once (sixteenth day); 1 drop of tincture in a glass of water, at 10.35 P.M. (twenty-third day); 1 drop of tincture in a wineglass of water at 12.30 P.M., 1 drop of tincture at 4.15 and 10.20 P.M. (twenty-fourth day); 1 drop of tincture at 8.45 A.M., 1 drop at 10.45 P.M. (twenty-fifth day); 3 drops of 3d in sugar, at 1.30 P.M., repeated dose at 7 P.M., 1 drop in water at 10.10 P.M. (thirtieth day); 1 drop of 3d at 8.15 A.M., 1 drop of 3d on sugar at noon, 3 drops at 6 P.M., 5 or 6 drops at 10.30 P.M. (thirty-first day); 7 or 8 drops at 8.30 A.M., 3 drops of 3d in water at 1 P.M., 7 drops of 3d in water at 10.20 P.M. (thirty-second day); 3 or 4 drops of 30th dil. at 8 A.M., same dose twice in afternoon, 6 or 7 drops of 30th at 10.40 P.M. (thirty-seventh day); 2 drops of 30th at 11 A.M. and 8 P.M., 2 or 3 drops at 10.10 P.M., and 2 drops at 10.20 P.M. (thirty-eighth day); 40 or 50 globules of 200th (forty-third day); 10 globules of 200th dil. at 11 A.M., 20 or 30 globules of 200th at 10.45 P.M., then 17 globules (forty-fourth day); 10 globules at 8.40 and 11.20 A.M., 12.20, 2.30, 4.30, and 6.20 P.M. (forty-fifth day); 3 globules of 30th at 10.5 A.M., afterwards a wineglass containing all the dilutions between 30th and 200th, then another, and a third wineglass at 10.30 P.M. (forty-sixth day); **32**, Dr. Berridge, took 10 globules of Dr. Lillie's 200th; **33**, Mr. —, took 201st prepared from Dr. Lillie's 200th, 12 drops in half a tumbler of water, and a dose at 12.50 and 3.30 P.M. (first day); a dose at 10.40 A.M. and 4 P.M. (second day); 2 drops at 10 A.M. (fifth day); **34**, J. P. Truman, M.D., Hahn. Monthly, vol. viii, 1872, p. 46, a man aged about fifty-five years,

who had sciatica, with scarcely any concomitant symptoms, took Verat., macerated in whiskey, for two days, in sufficient quantities to produce perspiration, then took $\frac{1}{2}$ ounce of the whiskey tincture at one dose; **35**, Berridge, North. Amer. Journ. of Hom. New Series, vol. iii, 1873, p. 500, Mrs. —, dissolved 1 drop tincture in $1\frac{1}{2}$ pints water, and took a wineglassful at 8.5 P.M.; **36**, Dr. N. Ford, Med. Rec., vol., ix, 1774, p. 155, effect of overdose; **37**, J. Steele Bailey, M.D., New Orleans Med. and Surg. Jour., July, 1877, p. 38, case of poisoning; (38 to 42 a, R. B. Sullivan, M.D., copied from MS.); **38**, T. L., aged fourteen years, took 10 pellets 3d dec., every half hour, all day, for four days, a solution of 5 drops tincture in water every half hour (sixth day); **39**, E. B. S., took 10 drops tincture in afternoon (first day), 5 drops every half hour (second day); **39 a**, same, two days later took 5 drops 1st dec. every half hour all day (first day), 1st dec. all day (second and third days), 3d dec. every half hour (fourth day); **40**, W. E. D., took 10 drops 6th dec. at 9.20 and 10.20 A.M. and 1 P.M. (first day); 10 drops 1st dec. at 10.12 A.M. and 1 P.M. (second day); **40 a**, same, took 3 drops tincture at 7 and 10 A.M., and at 2, 6, 6.30, and 10 P.M. (first day), same at 7.45 and 11 A.M. (second day), 10 drops at 8 A.M., 12 M., and 7 P.M. (fourth day); **40 b**, same, took pellets saturated with 30th potency, every half hour, for six days, with no results, then took pellets saturated with 3d potency, every half hour (first and second days), began at 2 P.M. (fourth day); **40 c**, same, took 3d potency every half hour (first day), 5 drops tincture every hour (third day), 10 drops tincture at 8 and 9 A.M., 12 M., and at 1 and 2 P.M. (fourth day); **41**, J. H. C., aged twenty-eight years, began at 7 A.M. to take 10th potency, every twenty minutes (first day), continued (second day); **42**, B. G., aged forty-six years, had rheumatic pains in the back, hip, and side, superficial vein of scrotum varicose, pains along the spermatic cord, dull heavy pain in frontal region, with vomiting, took drop doses of tincture every half hour for four days; **42 a**, the same, three days later took 5 drops 1st dec. every fifteen minutes.

Mind.—*Temporary delirium.⁴—*Quarrelsome and delirious, striking and kicking with right hand and foot; at times these movements appeared to be involuntary; this mental condition changed to a happy and comical delirious state, which continued fifteen hours.³⁴—Although I thought it probable I should die, I did not feel alarmed.²⁵—(Some depression of spirits (fourth day); great depression (fifth day)).⁴²—Depression and prostration.¹⁷—Great fear of death.³⁴—Most of the time, between the vomiting spells, he was lethargic, with slow and difficult respiration.³²—When not vomiting she lay in a stupor.¹³—(Feels stupefied, with great pain and fulness in head), (first and second days).^{42a}—[10.] Apparently unconscious (after seven hours).²³

Head.—**Confusion and Vertigo.** Confused sensation in head (after two hours).³⁴—*Vertigo,¹²³ etc.—When rising from a seat, or from bed, a slight dizziness (fourth day).³⁸—*Vertigo with the nausea (second day).⁴¹—Dizziness and nausea, followed by heat of surface (fourth day).^{40c}—Dizziness on rising, in the morning (seventh day).³⁸—Vertigo and sudden prostration.³⁴—(Must keep his bed; vertigo and vomiting as soon as he rises), (fifth day).⁴²—Vertigo and photophobia; relieved by closing eyes and resting head, in the morning (third day).³⁸—[20.] Dizziness and pain in the head (after ten or fifteen minutes).²⁴—**General Head.** Dull feeling in the head all the afternoon and evening (fourth day).^{40c}—Heavy dull pain in head with the weakness (first day).⁴¹—*Head felt full and heavy (second morning).⁴¹—Heavy dull headache, with occasional painful

throbbing in the temples (after four hours),¹⁷.—Constant dull headache at 4 P.M. (second day),¹².—(Violent headache of a central congestive character); aggravated by noise and motion (fifth day),⁴².—(Violent headache, with severe vomiting every fifteen or twenty minutes), (first and second days),⁴².—During this proving had no headache after the first and second days,⁴⁰.—Headache, which stopped at the temples and seemed to take a diagonal course across the head (after two hours, fourth day),^{40b}.—[30.] Slight headache, with full, pressing, heavy feeling in eyes (first day),⁴¹.—Queer feeling about the head (after two hours, second day),¹.—(Burning sensation of head, with flushed face), (fifth day),⁴².—**Forehead.** Some heaviness about forehead (after second dose, twelfth day),³¹.—Constant, dull, frontal headache, *with neuralgic pains in the right temple, close to the eye*, at 10 A.M.; dull pains over the eye, with quite severe drawing pains in the umbilical region, at 11 A.M.; slight frontal headache, with pricking pains in the region of the heart, at 12 M.; drawing pains in forehead at 2 P.M.; dull, frontal headache, with pricking pains in the præcordial region, at 3 P.M.; slight, frontal headache at 5 P.M., slight, dull frontal headache at 7 P.M. (first day). Slight, dull frontal headache, with a contractive feeling of the skin of the forehead, at 9.30 A.M.; dull frontal headache, with neuralgic pains in the temples, at 11 A.M.; very severe frontal headache, with dull aching pains in the umbilical region, at 2 P.M.; constant, dull headache at 4 P.M.; dull frontal headache, with neuralgic pains in the right temple, at 9 P.M. (second day). Dull frontal headache at 2 P.M.; severe frontal headache, with violent vomiting and hiccup, 2.20 P.M. (third day). Dull frontal headache at 12 M.; very severe frontal headache at 1 P.M.; dull frontal headache at 2 P.M. (fourth day),¹².—Steady, dull pain over right eye, gradually extending to forehead (after second dose, twenty-fourth day),³¹.—(Some frontal headache, with nausea; head feels full and congested), (fifth day),⁴².—Awoke in the morning with frontal headache, which seemed relieved after a stool (second day),^{40c}.—After 1 P.M. noticed a frontal headache, which extended back on left side of head to occiput; continued all day, more when lying down, especially when lying on occiput (first and second days),^{40c}.—Frontal headache, with cold feet and hands (second day),⁴¹.—[40.] Slight aching over *right* eye, also in right temple and right malar bone, just under the eye (twenty minutes, after third dose, first day),³¹.—Numb constricted pain in forehead, pressing back to the ears, sensation as if membrana tympani would break (second day),⁴¹.—Sharp drawing pain over the left eye, with a contracted feeling in the skin of the forehead (after ten minutes),¹².—On waking, after a short sleep, felt an indescribable sensation rising from forehead towards crown, and grasping, as it were, the vertex and occiput (first night),³¹.—**Temples.** A sensation of stiffness in the voluntary muscles, particularly the temporal and extensors of the head,².—Pain in left side of head at junction of parietal and temporal bones, in the forenoon (thirty-first day),³¹.—Pain in right mastoid process (half an hour, after fourth dose, thirty-eighth day),³¹.—The old pains began to fly about in temple and left trochanter major (after second dose, forty-sixth day),³¹.—Headache on left side back to temple (first day); on left side, from before backwards (second day),^{40c}.—Headache on left side to temple at 9 A.M.; stopped in the afternoon (third day),^{40c}.—**Occiput.** [50.] Dull headache in occipital region (third day); all day (fourth and fifth days); slight occipital headache (sixth day),³⁸.

Eye.—Full, pressing, heavy feeling in eyes, with slight headache (first

day),⁴¹.—Aching in left eye, while riding in omnibus (after second dose, second day),³¹.—Severe shooting suddenly-stopping pain in *left eye* (a few minutes after second dose, fourth day),³¹.—**Brow and Orbit.** On going to bed, had an intense, painful itching in middle of *left eyebrow* (twenty-fourth day),³¹.—A dull heavy feeling over *left eye*, worse when stooping, at 2 P.M. (second day),⁴⁰.—A distinct ache, directly over *right eye* (immediately, after first dose, fourth day),³¹.—Aching in upper part of *right orbit* (twelfth and sixteenth nights),³¹.—Slight transient pains above the *right eye* (after half an hour, twenty-third day),³¹.—Pain in upper half of *right orbit* (after first dose, thirty-eighth day),³¹.—**Lids.** [60.] Feeling of fulness about the eyelids, as if he had been crying a good deal, with increased secretion of tear: (ten minutes after third dose, first day),³³.—Eyelids heavy and sleepy, with soreness (fifth day),³³.—**Lachrymal Apparatus.** (Increased tears), (fifth day),⁴².—Profuse secretion of tears at 2 P.M. (third day); at 1 P.M. (fourth day),¹².—**Pupil.** *Dilated pupils,^{2 12 14}, etc.—**Vision.** *Dimness of sight,^{2 3 24}.—(Dimness of vision; green circles around the gaslight), (fifth day),⁴².—*Cannot walk; if I attempt it, I am very faint and completely blind; obliged to keep in the horizontal position, at 2.20 P.M.; cannot walk across the room without becoming blind, at 4 P.M.; can walk about ten rods, when I become blind, and am compelled to sit down, at 5 P.M. (third day),².—Can walk about four rods, I then become blind and faint, but can sit up without any trouble, at 1 P.M. (fourth day),¹².—**Photophobia and vertigo, relieved by closing eyes and resting head,** in the morning (third day),³⁸.—[70.] *If I assumed the erect position for even a minute, dimness of sight and partial syncope supervened, which obliged me to resume the recumbent posture again (after four hours); the inability to assume the erect position continued for an hour and a half,²⁵.—*Unsteady vision (second day),⁴¹.—Cloud before the eyes, chiefly during vomiting (first day),¹.—A little dazzling of the eyes,⁵.—Immense circle of green color appeared round the candle, which, as vertigo came on and I closed my eyes, turned to red,¹¹.

Ear.—A fulness in the left ear, with a continued beating of the carotids, I could hear it beat distinctly, during the proving,^{40b}.—Fulness and throbbing in the carotid in the left ear; this came on soon after beginning to take the drug (fourth day),^{40c}.—Ringing in the ear; moving quickly makes me very deaf; at 2 P.M. (fourth day),¹².—(Hears noise in ear), (fifth day),⁴².—(Humming in ears and sensitiveness to noise; ears feel cold with spells of deafness), (fifth day),⁴².

Nose.—[80.] Nose looks pinched and blue at 2 P.M. (third day),¹².—For the third time noticed nasal catarrh and sneezing, soon passing off (shortly after third dose, thirty-second day),³¹.—With the vomiting, running from the nose and eyes,¹¹.—Profuse secretion of mucus from the nose at 2 P.M. (third day); at 1 P.M. (fourth day),¹².

Face.—Features sunken,¹¹.—Face pale (second day),³⁰.—Face very pale at 2 P.M. (third day),¹²; (after seven hours),²³.—Very pale, with cadaverous look (after half an hour),²⁴.—(*Face flushed), (fifth day),⁴².—Face blue,¹³.—[90.] Blue hippocratic face for three hours,¹³.—Stinging pain in right jugum malar (forty-fourth night),³¹.—Distinct pain in right angle of lower jaw (after third dose, thirtieth day),³¹.—*Dry lips and mucus of mouth thick (third day); dry mouth and lips all day (fourth day); mouth less dry (fifth day),³³.—Jaws rigid, and nothing could be put into her mouth,¹³.

Mouth.—**Teeth.** (Toothache cured),⁹.—**Tongue.** Tongue white,

not coated; looked as if bleached (second day),^{40c}.—Tongue white in the centre, with red edges and white tip; it does not look like a coated tongue, but as if the blood were pressed out, in the morning (third day); edges red, tip white, and centre almost a pure white (fourth day),³⁸.—(Tongue coated yellow, especially along the base and centre), (fifth day),⁴².—Tongue coated yellow along the centre, in the morning (third and fourth days),¹².—[100.] Tongue bright red at tip and edges, and white in centre (second day),³⁹.—Tongue red on the edges, grayish from the tip half way back; the back part gray, with red spots of the size of a pin's head. Strawberry tongue (fourth day),^{40a}.—(*Tongue feels as if he had been drinking hot tea; scalded, coated yellow at base and edges; somewhat red in centre), (fifth day),⁴².—(*Tongue feels as if it had been scalded, coated yellow, with red streak in centre), (first and second days),^{42a}.—Tongue feeling as if it had been scalded, at 9 P.M. (second day); at 8 A.M. (fourth day),¹².—Acrid, burning sensation in the mouth,¹⁵.—**Saliva.** Great increase of secretion of saliva (first day),¹⁰.—With the hiccough there was copious secretion of saliva and discharge of mucus from the stomach and nose,¹⁶.—Profuse secretion of saliva at 2 P.M. (third day); at 1 P.M. (fourth day),¹².—**Taste.** Flat taste in the mouth, in the morning (third day),¹².—[110.] Flat, bitter taste in the mouth, in the morning (fourth day),¹².—Taste bitterish, disagreeable, peculiar, reminding one of the odor of spermatic fluid,³⁰.—(Food tastes bitter), (fifth day),⁴².—Water tastes like lime-water (third day),³⁸.—**Speech.** Almost speechless,²².—Total loss of speech for some time,²¹.

Throat.—Dryness of throat for one hour, causing short dry cough (one hour and a half after first dose, second day),³³.—In the throat and fauces a sense of dryness and heat, which finally reached the stomach; in the course of an hour this dryness and burning sensation in the throat and stomach became intense, and a disposition to hiccough was excited, which commenced, gradually increasing in frequency until it reached fifteen or twenty times in the minute; this was attended with some sickness and retching until vomiting took place; this was violent, and seemed to come on about every ten or fifteen minutes for the space of an hour,¹⁵.—Burning in the throat,¹⁴.—Burning sensation in throat, œsophagus, and stomach (after ten or fifteen minutes),²⁴.—[120.] Ever since swallowing the dose there has been a persistent, peculiar numbness in the fauces (after twenty minutes); after second dose the numbness of fauces was for awhile very marked; not so much so now (after thirty-five minutes); numbness still persistent (after one hour and a third); numbness of throat not noticeable (after three hours),³⁰.—With the hiccough, violent and constant spasms of the upper part of the œsophagus; cannot swallow, at 2 P.M. (third day); at 1 P.M., lasting two hours (fourth day),¹².—Sensation of something like a ball rising in the œsophagus, which seemed to extend up as far as the top of the sternum, as if propelled by a gradual tonic contraction of the stomach (after one hour),³.—(Inclination to swallow, with burning pain along the œsophagus), (first and second days),^{42a}.—Submaxillary glands swollen, sore to touch (fourth day),³⁸.

Stomach.—Appetite and Thirst. Ravenous appetite on waking, in the morning (second day); at noon (fourth day),^{40a}.—Very thirsty, drinks little, which relieves for a short time (third day),³⁸.—***Thirst**, with slight nausea, an hour after rising, in the morning (third day),³⁸.—**Eructations.** Frequent eructations of wind,²⁰.—For several days the patient was troubled with an acrid, sour rising from the stomach,³⁴.—**Hiccough.** [130.] *Almost constant hiccough,³.—*It causes excessive and painful singul-

tus,⁸.—Hiccough, with the frontal headache, at 2.20 P.M. (third day),¹².—**Constant hiccough, with violent and constant spasms of the upper part of the œsophagus, at 2 P.M. (third day); at 1 P.M. (fourth day),¹².—*Hiccough, with constant and severe spasms of the upper part of the œsophagus, at 1 P.M. (fourth day),¹².—Nausea and Vomiting.* **Nausea,*^{7 9}.—Some nausea (after four hours); considerable nausea (after six hours and a half),⁶.—Nausea, which passed off on eating (after fifty-five minutes),³⁵.—(**Great nausea and vomiting, with cold sweat*), (fifth day),⁴².—(Nausea with the frontal headache), (fifth day),⁴².—[140.] **Nausea and dizziness, followed by heat of surface* (fourth day),^{40c}.—Nausea, with desire for stool (first day),⁴⁰.—Nausea and vertigo, with pain in bowels; had these symptoms four times in succession, about fifteen or twenty minutes apart, and each lasted three to five minutes (second day),⁴.—Stomach feels mawkish and slightly nauseated (after twenty-five minutes); slightly nauseated (after one, and one hour and a half); nausea marked, relieved by eructations of wind (after two hours and a half),²⁹.—Began to feel nauseated, and should have vomited had I not made an effort to restrain myself (after four hours); vomiting, with great pain, which continued for about half an hour, requiring all my strength to support myself (after four hours and a half),¹⁷.—Uneasiness at the stomach,²⁶.—Slight uneasiness at the stomach (in ten or fifteen minutes),³; (after four hours),⁶.—After one hour a slight sense of uneasiness at the stomach, but not amounting to nausea; this continued with very little inconvenience for half an hour, when vomiting commenced. The contents of the stomach were thrown off without nausea, but with a sense of rising in the œsophagus, which perhaps might be compared to the rumination of animals. Judging from my sensations at the time, should suppose the muscular fibres of the stomach contracted gradually and steadily upon its contents until they were expelled, the diaphragm and abdominal muscles remaining entirely inactive.².—Nausea and severe vomiting on rising in the morning (seventh day),³⁶.—Extreme sickness and distress at the epigastrium (after thirty or forty minutes),⁴.—[150.] **Nausea and vomiting.*²⁷.—Frequent efforts to vomit (after half an hour),²⁴.—Several ineffectual attempts to vomit (after thirty or forty minutes),⁴.—Severe itching (after ten or fifteen minutes),²⁴.—Retching and vomiting incessantly,²².—An effort to vomit after the second dose, but without ejecting anything from the stomach; efforts to vomit were made every few minutes, but without success, except once, when a small quantity passed from the mouth,²¹.—Retching attended with intense pain, at times almost amounting to agony (after four hours and a half),¹⁷.—Painful retching,¹⁰.—Ineffectual retching with the vomiting,³.—Constant and ineffectual retchings,⁴.—[160.] Retching for three-quarters of an hour, vomiting food, mucus, etc., not getting any relief until I threw off some bitter stuff, with the characteristic taste of Veratrum (after four hours and a quarter),²⁵.—**Vomiting,*^{1 3a 9}, etc.—Vomiting without effort or nausea (after three-quarters of an hour),¹.—Vomited very freely,¹⁸.—Commenced vomiting (after a few minutes); vomiting kept up, with severe retching, every few minutes, when it gradually subsided; the matter vomited was of white, ropy mucus; the interval between vomiting, for three hours, was not any time longer than five minutes, and most of the time did not exceed one minute,¹³.—Repeated vomiting, with some hiccough; considerable bile thrown up (first day),¹.—Profuse vomiting of thick, glairy mucus and water, at 2 P.M.; violent vomiting, with the frontal headache, at 2.20 P.M. (third day); violent vomiting of dinner, and then of a thick, glairy mucus, at 1 P.M. (fourth day),¹².—(Severe vomiting with the violent headache, 11

A.M.; continued violent, with collapse and cold sweat, at 4 P.M.), (first and second days),^{42a}.—(Vomits food, if ever so little is taken), (first and second days),^{42a}.—Vomiting of bile, and then, of mucus and dark-colored blood; then severe retching and moaning, with great fear of death; this stage continued about an hour, when I gave a dose of Ars. 3; soon afterwards the retching and vomiting ceased,³⁴.—[170.] Vomiting; the vomited matter appeared to consist at first of the food and contents of the stomach, afterwards of a glairy mucus,¹¹.—Free vomiting, accompanied with an increased flow of saliva and general perspiration; the vomiting continued at intervals for upwards of an hour, and until considerable bile had been thrown up (after three-quarters of an hour),¹⁰.—Vomiting, attended with very little inconvenience at first, but after continuing for a short time, became more severe, the ejections consisting principally of bile (after one hour and a quarter),³.—**Stomach.** Great prostration of digestive functions, subjecting the experimenter to a temporary but severe attack of dyspepsia,²⁶.—At 6½ P.M. I took supper, although food was repugnant to me, and I ate but little. All through the evening I suffered from decided dyspepsia, partially relieved by a glass of whiskey,²⁹.—A feeling of tightness, stomacheal wretchedness,²⁹.—Distress at the stomach,³.—The symptoms of globus hystericus are sometimes present, but very rarely, in nervous females,²⁷.—Dull aching pains in the epigastrium, at 9 P.M. (second day),¹².—Dull pain in epigastrium,².—[180.] Spasms of the stomach and respiratory organs were frequent and severe (in three persons), (after three hours),⁴.—Excruciating pain in the lower part of the stomach, the pain extending to about the size of my hand; the feeling of the seat of the pain was, that all the warm tea, water, etc., that I took to provoke the vomiting, went under the pain, making the constriction more violent,¹¹.—Feeling of cramp in the stomach, as if the muscles were contracting, relieved by bending forward, for ten minutes; almost directly afterwards pain in abdomen, as if drawn in, for half a minute (five hours after second dose, second day),³³.—³—* (*Twisting-tearing pain in stomach*, aggravated by least motion), (first and second days),^{42a}.—Feeling as if the stomach were slowly contracting on its contents, and forcing them into the œsophagus, producing a sensation as of a ball rising up to the top of the sternum (first day),¹.—Sensation in the epigastric region, as though a full dose of calomel were operating (first day),¹.—Sharp flying pains in the epigastric and umbilical regions, in the evening (first day),¹².—Sharp pains in the epigastric and umbilical regions, and passing down to the pubes, at 11 A.M. (second day),¹².—Very frequent neuralgic pains in the cardiac portion of the stomach, at 7 P.M. (first day),¹².—Such great irritability of the stomach that it seemed for a while that he must die, from the impossibility of retaining the necessary stimulus,¹⁶.—[190.] On waking a second time, felt as if *waves* were rising from the stomach into the chest (first night),³¹.—Slight glow in the stomach (after two grains),¹.

Abdomen.—**Hypochondria.** Dull, heavy, aching pains in the region* of the gall-bladder, with dull pains in the umbilical region, at 10 A.M. (third day),¹².—Pain in the region of the gall-bladder, at 8 P.M. (third day); dull pains in the region of the gall-bladder, at 8 A.M. (fourth day),¹².—**Umbilicus.** Quite severe drawing pains in the umbilical region, with the headache, at 11 A.M.; frequent drawing pains in the umbilical region, at 12 M. (first day),¹².—Neuralgic pains in the right side of the umbilicus, passing down to the groin, in the evening (first day),¹².—Dull aching pains in the umbilical region, at 2 P.M. (second day); constant

and severe cutting, aching pains in the umbilical region, with rumbling in the bowels, with a soft stool, at 10 A.M.; dull aching pains in the umbilical region, with rumbling, at 4 P.M.; with sharp, neuralgic pains in the left groin, at 5 P.M.; constant dull pain in the umbilicus, at 8 P.M. (third day); dull aching pains in the umbilicus; by spells they are very sharp and shooting, at 8 A.M. and 12 M.; with distress in the umbilical region, at 1 P.M., and with desire for stool, mushy stool, followed by an aching sensation in the rectum, at 10 P.M. (fourth day).¹²—Pain below navel (after second dose, thirty-second day).³¹—**General Abdomen.** Flatulence (after four hours).¹⁷—Sore across the abdomen (second morning).⁴¹—[200.] Gripping of the bowels, with considerable pain over the epigastrium (after four hours); pain in stomach and bowels much more severe (after four hours and a quarter).¹⁷—Pain in abdomen (first day).⁴¹; (third day).^{40c}.—Pain in the bowels, with the nausea (second day).⁴¹.—**Pain and soreness across the abdomen, just above the pelvis*, which continued all day, gradually decreasing (third day).⁴¹.—Pain in abdomen, as if drawn in, for half a minute, almost directly after the cramp in the stomach (second day).³³.—Slight dull pains in the bowels, in the morning (fourth day).¹².—Dull pain in the bowels, at 2 and 6 P.M. (fourth day).¹².—Pain in bowels, with *flatulence*; this is a very marked symptom, as the prover seldom passes flatulence (second day); flatulence continued all day (third day); a marked symptom (fourth day).^{40b}.—Pain in bowels ran down into the scrotum (fourth day); the pain in the scrotum was the last to disappear.^{40b}.—(Severe cutting pains in lower part of abdomen), (fifth day).⁴².—[210.] **Pain in lower portion of bowels* (second day).^{40c}.

Rectum and Anus.—Sensation about anus as if something were crawling out or about it, it seemed like a worm (third day).^{40a}.—Tenesmus and diarrhœa, copious and offensive stool, with burning of anus and pale face; tenesmus and burning before and up to the stool, but not during and after; felt better after stool (third day).³⁸.—At 1 P.M., while riding, was attacked with sudden and fearful tenesmus, which doubled me up in spite of all I could do; an offensive, watery stool came with a gush and great force, it came all at once, and that was the end of it; after the stool there was pain in the bowels, with ineffectual desire for stool; pains in the abdomen continued all the afternoon (fourth day).^{40a}.—Desire for stool woke me, with urging tenesmus, at 6.30 A.M.; stool soft, stringy, and doughy, at 7.30 A.M.; another stool of about the same consistence, but not with so much tenesmus (fifth day).^{40a}.—(Frequent desire for stool, which is preceded and followed by cutting pain in rectum), (first and second days).^{42a}.—Desire for stool, with nausea; some wind passed but not much feces (first day).⁴¹.—Urgent desire for stool, with no passage, but felt weak and faint (second day).⁴¹.

Stool.—Soft papescent stool in the morning, another with pains in the umbilical region and rumbling in the bowels, at 10 A.M. (second day); mushy stool without pain (third day); natural stool, followed by aching in the rectum, at 12 M.; mushy stool, with dull pain in the umbilicus, followed by an aching sensation in the rectum, at 10 P.M. (fourth day).¹².—Three loose stringy stools, with tenesmus and burning in the anus up to stool, relieved by stool (fourth day).³⁸.—[220.] One loose stool (sixth day); several loose stools during the same day, with tenesmus, felt better after each stool (seventh day).³⁸.—Usual morning stool, but scanty and soft; at noon tenesmus, followed by loose stool, with burning of anus; stool relieves tenesmus; four stools all the same (second day); constipated (third day).³⁹.—Had a stool before 5 A.M., larger, softer, brighter in color, prompter, and sooner after rising than usual (fifth day).³¹.—Stools unusually copious, free,

and lighter in color than usual (thirty-first and thirty-second mornings),³¹.—Bowels move twice a day, morning and evening (before the proving); two soft stools in evening, one at 6 and the other at 7 P.M. (second day),⁴⁰.—Soft stool, discharged easily (first day); soft stool, with slight tenesmus, in the morning; during the day several soft stools, but no tenesmus (second day),^{40a}.—Evacuation of bowels regular, but soft and stringy, had to use some force to start stool from sphincter, it seemed to stick, but after passing it was doughy and stringy (first day); two soft stools after 5 P.M., which was doughy and stringy, with tenesmus, which was relieved by stool (fourth day); alternating soft and hard stool every two hours; the soft stool was doughy, stringy, and large; the hard stool was of medium size, and followed by pain (fifth day),^{40b}.—Stool at 9 P.M., which was doughy and hard to expel; the same again at 12 M., with tenesmus (first day); one soft stool (second day),^{40c}.

Urinary Organs.—Smarting in urethra on urinating (thirty-second morning),³¹.—Moderate diuresis; the same effect was also noticed in two other individuals, who experimented with it at the same time,^{3d}.—[230.] Average daily amount of urine 25.5 fluid ounces; sp. gr. 1024.6 (before experiment); amount 35 ounces; sp. gr. 1020 (during experiment),^{8b}.—Urine scanty (second day),³⁰.—Decreased amount of clear urine (second day),^{40a}.—Urine *very clear* (first day),^{40a}.—On rising in the morning, found the urine passed the night before turbid, dark, depositing a reddish sediment, and covered with a scum (thirty-second day),³¹.

Sexual Organs.—Pain in both testicles (second day), worse in the left, in the morning (fifth day),^{40b}.—At 6 P.M., pain in both testicles, worse on left side, sometimes shoots up the cord into abdomen; continued all the evening (first day),^{40c}.—During the proving had a severe pain in left testicle all the time (after second day),^{39a}.

Respiratory Organs.—In the evening had a tickling spasmodic cough coming from just above the sternum (second day),⁴¹.—Respiration (normal, 20) 18 (after one hour); 16 (after two hours); 14 (after three hours); 12 (after four hours); 8 (after four hours and ten minutes); 6 (after four hours and a quarter),⁷.—[240.] **Difficulty of breathing*,¹¹.—Difficult respiration, with nausea (second day),⁴¹.—Slow and difficult respiration between the vomiting spells,³¹.—Breathing heavy, almost stertorous (after seven hours),²³.—When a fit of retching came on, felt as if going to be asphyxiated,¹⁷.—**Convulsive breathing, almost to suffocation* (after half an hour),²⁴.

Chest.—Stricture of the chest,¹⁴.—When the vomiting ceased he complained of severe constriction about the chest, with great anguish; for ten to fifteen minutes,³¹.—(Chest feels oppressed as from a heavy load), (first and second days),^{42a}.—Drawing pain in lower thoracic region, with nausea (first day),⁴¹.—[250.] Pain most severe over the front of the chest, with occasional twitchings of the small intestines (after five hours),¹⁷.—Feeling of dislocation in left side, while walking (right, left), for half an hour, in the afternoon (thirty-eighth day),³¹.—(Complains of pain in left side in region of heart), (first and second days),^{42a}.—Throbbing in right side of chest for five minutes (twenty minutes after first dose, second day),³³.—A steady pain of some intensity about *left* nipple, in the afternoon (fifth day),³¹.—The former pain (a steady aching) under the left nipple, but more marked than formerly (twenty-fourth evening),³¹.—Pain about the spot below left nipple (after second dose, thirty-second day),³¹.

Heart and Pulse.—**Præcordium.** Pricking pains in the region

of the heart, with the headache, at 12 M. and 3 P.M. (first day),¹².—Constant burning distress in the region of the heart, at 1 P.M. (third day),¹².—Burning pain in the region of the heart, under the sternum, at 2, 3, and 6 P.M. (fourth day),¹².—[260.] Dull, hot, aching pain in the region of the heart, at 3 P.M. (fourth day),¹².—Neuralgic pains in the region of the heart and cardiac portion of the heart, at 5 P.M. (first day),¹².—**Heart's Action.** (Throbbing carotids), (fifth day),⁴².—Slowness of the heart's action (fourth day),^{30a}.—(Beats of heart slow and weak), (first and second day),^{42a}.—**Pulse.** Pulse as frequent but softer than usual (first night), 58 standing (second night),³⁹.—Pulse ranged from 72 to 80, never exceeding the latter, during the proving,^{40b}.—Normal pulse 80; 70 and weak (fourth day); slow (seventh day),³⁸.—Pulse immediately rose from 63 to 71, and became much more feeble; in twenty minutes it was 60,³².—Pulse rose at once from 74 to 80, and in five minutes fell to 70,³⁴.—[270.] Pulse 80 and irregular, at 7.15 A.M.; normal (72 to 76) the remainder of the day (second day); 78, full and strong (fourth day),^{40a}.—Pulse 80, in the evening (first day); 78 at 7.30 A.M. (second day); 68, regular at 8 A.M.; 72, irregular and soft at 9; 80, regular at 10; 84, regular and full at 11; 83, regular and soft at 12 M.; 72, regular and full at 2 P.M.; 76, regular and full at 3 P.M.; 83 at 4.30; 82 at 6; 85 at 9 P.M.; 76, regular at 11 P.M. (third day),^{40c}.—Pulse 70 at 8 A.M., 85 at 11, 84 at 12, 75 at 1 P.M., 80 at 2 P.M. (fourth day),^{40c}.—Normal pulse, 74 to 76; 72 at 9 A.M., 68 at 12 M., 58 at 1 P.M.; 76 and full at 4.30 (first day); 90, very weak, hardly perceptible, at 9 A.M.; 72 at 12 M. (second day); normal, 74 at 7 A.M. (third day),⁴¹.—Pulse 85 (before experiment); 1 P.M. 76; 80 at 2.10 P.M.; 74 at 2.40 P.M.; 69 at 3.15 P.M.; 66 at 3.40 P.M.; 72 at 4 P.M.; 73 at 4.30 P.M.; 67 at 5.15; 68 at 5.30 P.M.; any exertion an effort, and when forced, rapidly sending pulse up to 110, walking once or twice around the room sufficient to do this; 70 at 6 P.M.; nearly 70, down at times to 62, at 6.15 P.M.; 66 at 6.40 P.M.; 70 at 7 P.M.,³⁰.—Pulse 80 (before experiment); 82 (after twenty-five minutes); 76 (after two hours and a half),²⁹.—Pulse diminished from 75 per minute to 58–9,^{3a}.—Pulse 60, before experiment; 52 (after half an hour); 48 (after four hours),⁶.—Pulse 70 (before experiment); 65 (in one hour); 60 (in two hours); 50 (in four hours); 46 (in six hours and a half),^{6b}.—Pulse 70 (before experiment); with the nausea, pulse diminished both in force and frequency, 64 (after four hours); 40 (after five hours); 56 (after five hours and three-quarters); natural (after nine hours),¹⁷.—[280.] Pulse 74 (before the proving); 67 at 11 A.M.; 70 at 12 M.; 66 in the evening (first day); 79 in the morning; 76 at 9.30 A.M.; 71 at 11 A.M.; 74 at 2 P.M.; 70 at 4 P.M. (second day); 70 in the morning; 46, soft and very weak, at 1 P.M.; 44, soft and very weak, at 2 and 4 P.M.; 46 at 5 P.M.; 61, soft and weak, at 8 P.M. (third day); 64, soft and full, in the morning; 55, soft and very weak, at 12 M.; 44, soft and very weak, can just be felt, at 1 P.M.; 46, sitting or lying, at 2; 57, soft and weak, at 5; 60 at 6 P.M.; 66 at 10 P.M. (fourth day),¹².—Natural pulse 90; before experiment 94; 87 (after one hour); 80 (after two hours); 75 (after three hours); 65 (after four hours); 50 (after four hours and ten minutes); 42 (after four hours and a quarter),⁷.—Pulse 80 (before experiment); 60 (in three hours and a half); 55 (in four hours); somewhat depressed (second day),¹⁰.—Pulse diminished about ten beats per minute,⁸.—Pulse rose at once from 74 to 80, and in five minutes fell to 70 (after first dose); fell at once from 76 two or three beats (after second dose); fell from 82 to 80 (twenty minutes after third dose, first day); rose at once from 60 to 66, and in fifteen minutes had fallen

nearly to 60 (after first dose); rose at once from 76 to 82, and in fifteen minutes fell to 76 (after fourth dose); rose from 66 to 72, and fell in half an hour to 66 (after fifth dose, second day). Fell from 70 to 62 in thirty minutes (after first dose, third day). Rose at once from 82 to 92, in twenty-five minutes it was 73, in twenty minutes more it was 72 (after first dose); arose at once from 72 to 80, and in five minutes fell to 76 (after second dose, twelfth day). Rose at once from 64 to 76, and fell in ten minutes to 64 (after first dose); rose at once from 72 to 80, and in seven minutes fell to 70 (after second dose, fourteenth day). Fell from 82 to 76 while sipping the dose (fifteenth day). Rose at once from 70 to 80 (after first dose, sixteenth day). Rose at once from 64 to 76, and in a few minutes fell to 70 (twenty-third day). Rose at once from 78 to 82, and in five minutes fell to 74 (after first dose); 92 (after a meal, and before the dose); rose at once to 98, and in twenty minutes was 88 (after second dose); rose at once from 68 to 70, but fell to 68 in a minute or two (after third dose, twenty-fourth day). Rose from 64 to 66, and in a minute or two fell to 64 (after first dose); rose at once from 74 to 78, and in five minutes fell to 74 (after second dose, twenty-fifth day). Rose at once from 82 to 98 (after first and second doses); rose in three or four minutes from 82 to 88 (after third dose, thirtieth day). No rise in first minutes, but in fifteen minutes fell from 63 to 62 (after first dose); rose from 74 to 80, and in five minutes fell to 74 (after second dose); rose at once from 86 to 106, and in five minutes fell to 82 (after third dose); rose from 72 to 78 (after fourth dose, thirty-first day). Rose from 66 to 72 (after first dose); rose from 66 to 68 (one or two minutes after second dose); rose from 64 to 72, and had not come down in twenty-five minutes (after third dose, thirty-second day). Rose from 64 to 70 (after first dose); rose five or six beats (after second and third doses); rose at once from 72 to 78 (after fourth dose, thirty-seventh day). Rose at once from 80 to 90, and in half an hour fell to 70 (after first dose); rose six beats (after second dose); rose from 76 to 84, and in five minutes fell to 76 (after third dose); rose at once from 66 to 76, and fell in half an hour to 66 (after fourth dose, thirty-eighth day). Rose twenty beats (forty-third day). Rose at once from 70 to 80 (after first dose); rose from 70 to 79, and in two or three minutes had fallen to 78 (after second dose); rose to 86, in twenty minutes had fallen to 68 (after third dose, forty-fourth day). Rose from 60 to 68, and in fifteen minutes had fallen to 60 (after first dose); 74, in ten minutes was 76, in five minutes more was 84, afterwards 66 (after second dose); 70 (before third dose is dissolved); 80, in half an hour 66 (after fourth dose); rose from 82 to 86, and fell in a few minutes to 76 (after fifth dose); rose from 74 to 78, and in fifteen minutes had fallen to 64 (after sixth dose, forty-fifth day). While the globules were melting on tongue, pulse rose from 94 to 96, and at once began to fall, and in ten minutes had sunk to 88 (after first dose); rose at once to 100, and in ten minutes was 88 (after second dose); rose at once from 78 to 86 (after third dose); rose at once from 70 to 74 (after fourth dose, forty-sixth day).³—Pulse small and creeping, and 34 in a minute; the ordinary frequency ranging from 56 to 58.³—Pulse reduced from 100 to 40.¹⁶—Pulse at the wrist 40 in the minute, scarcely perceptible.²—Pulse very small, about 40 (after half an hour).²⁴—Pulse very weak, small, and soft, 34 in a minute (first day).¹—[290.] Reduced pulse to 38 beats a minute.⁵—(*Slow pulse*), (first and second days).^{42a}—Pulse slow (30) and not perceptible at the wrist (after four hours).²⁵—Pulse reduced to 24, full and intermitting every sixth or seventh beat.²⁰—Pulse weakened so as to be

scarcely perceptible, and reduced from 68 to 52,¹⁵.—Pulse scarcely perceptible in the radial artery,^{9 11 22}.—Pulseless for three hours; then it could be counted; it was 36, very weak and soft,¹⁸.—No pulse could be found in the radial arteries, and but slight in the carotids (in two persons), (after three hours),⁴.

Neck and Back.—**Neck.** Neck and arms ache severely (third day),¹².—Back of neck and arms ache severely; almost impossible to hold my head up, at 1 P.M. (fourth day),¹².—[300.] Severe aching in the neck, very much worse by moving, at 2 P.M. (fourth day),¹².—Very severe aching in the back of the neck; very difficult to hold my head up, at 1 P.M. (third day),¹².—Pain in back of neck, feels as if the cords were loose (first day),⁴.—Pain in middle of left neck (one hour after second dose, thirty-first day),³¹.—A new pain in right sterno-mastoid near the process (twenty-fourth evening),³¹.—Pain in *right* side of neck about middle of sterno-mastoid, and afterwards an itching in same place on the *left* (*right-left*), (twenty-fourth night),³¹.—Distinct pain in middle of left neck (after third dose, thirtieth day, and one hour after second dose, thirty-first day),³¹.—Pain in right side of seventh vertebrae (after fourth dose, forty-fifth day),³¹.—Pain in left side of neck about middle (after second dose, forty-sixth day),³¹.—**Back.** Back very weak (after five hours),¹⁷.—[310.] Pain in back (half an hour after first dose, twenty-fifth day),³¹.—Aching in right scapula (in bone) for ten minutes, and at the same time a dart from right clavicle to scapula (half an hour after first dose, second day),³³.—For the first time had a pain on *right* side of dorsal spine (after second dose, thirty-second day),³¹.—A long-continued, steady thrilling about an inch to left of dorsal vertebrae four inches below scapula (twenty-fourth evening),³¹.—The thrilling quivering sensation about an inch from spine, and about four inches below left scapula, has been felt nearly the whole evening; it is about the size of a half-crown in extent (after third dose, thirty-first day),³¹.—The thrilling in the back changed once into a severe ache, on rising from a reclining posture (after second dose, thirty-second day),³¹.—Thrilling and crawling in left back (thirty-seventh day),³¹.—Much thrill and crawling in the spot on left of dorsal spine, in the afternoon (thirty-eighth day); in the evening (forty-fourth day),³¹.—Pain at the right of the sacrum where it unites with the pelvis (after second dose, forty-sixth day),³¹.

Extremities.—Hands and feet shrivelled up, as if they had been in water a long time,¹³.—[320.] Feeling of clumsiness in the limbs,¹⁴.—Weakness and stiffness of the limbs (after half an hour),²⁴.—Almost entire loss of power of the gastrocnemii muscles (after two hours); all the muscles of the forearm affected in the same manner (after five hours),³².—Sensation of cramp in the gastrocnemii, with inability to exert them. There was no contraction in them, but they were for a time almost paralytic, lasting about an hour (after two hours, second day); repeated in the gastrocnemii and muscles of the forearm (after second dose, second day),¹.—Several times, a sensation of cramp in the gastrocnemii and muscles of the forearm. There was no contraction in them, but they were for a time almost paralytic. It seemed to affect indiscriminately those muscles that had been most affected for a short time before, being sometimes the calf of the leg, sometimes the forearm, sometimes the extensors of the knee,¹⁴.—Slight drawing pains in the right elbow and calves of the legs, in the evening (first day),¹².—Pain returned above *left* elbow, rose to middle of humerus, and then to shoulder-joint; it was severer than last night; it then went to *left* instep and outside of *left* ankle; it also went over to *right* ankle (*left-*

right), (half an hour after fourth dose, second day),³¹.—Pain in middle of *right* tibia; afterwards a dull steady pain in muscles of *left* thigh, and a similar pain in muscles above ridge of left scapula (after first dose, third day),³¹.—Slight, transient pains in *right* and *left* knees, *left* tibia above inner malleolus, above *left* elbow, the *right* eye, and *left* trochanter major (after half an hour, twenty-third day),³¹.—Momentary pains in knees and elbows, generally about the condyles (after first dose, twenty-fourth day),³¹.—[330.] Pains in *left* instep and top of *left* shoulder above clavicle, and in *left* heel; these were transitory (after second dose, twenty-fourth day),³¹.—Pain in back part of second joint of *right* middle finger; also in second phalanx of *right* great toe; had formerly similar pains in fingers and toes, but did not record them, fearing they were not reliable; for the same reason did not record pain in *right* pisiform bone, which returned this morning (twenty-fourth day),³¹.—The pains during the evening severer and steadier than before, chiefly in the condyles of legs and arms (twenty-fourth day),³¹.—During the day felt occasionally the usual pains in the joints, especially in outer *left* ankle; also felt once the pain in second phalanx of *left* great toe (twenty-fifth day),³¹.—Pain in *left* elbow, in lower third of *left* tibia, in *left* ankle, worse in inner malleolus (two hours after second dose, thirty-first day),³¹.—Pain in *left* inner malleolus, the *left* great trochanter, the *left* shoulder, and the inner condyle of *left* tibia, in the forenoon (thirty-second day),³¹.—A return of former symptoms in *left* humerus, *left* ulna, metacarpal bone of *right* little finger, middle joint of *right* middle finger, last joint of *right* thumb, *left* external malleolus, *left* scapula, *right* pisiform bone, and the thrilling and crawling in *left* back; this he has felt every day for hours at a time, ever since he took 3d dilution (thirty-seventh day),³¹.—Pain in *right* scapula, head of *left* fibula, inner condyle of *left* humerus, upper half of *right* orbit, and in inner side of *left* thigh, just above condyle (after first dose, thirty-eighth day),³¹.—Pain in outside of middle of *left* leg, in *left* radius below elbow, in middle of *left* femur, in outside muscles, and in *left* trochanter major (immediately after second dose, forty-fifth day),³¹.—Pain in middle of *right* tibia and *right* shoulder (after sixth dose, forty-fifth day),³¹.—[340.] Pains in *right* trochanter major, external condyle of *left* humerus, *left* radius, and ulna, middle of *right* tibia, *left* ankle externally and internally, *left* side of neck about middle, *left* instep on stretching the foot, and for the first time at the right of the sacrum where it unites with the pelvis; a dull aching in *left* hip while sitting on it (after second dose, forty-sixth day),³¹.—At once felt a thrilling ache in *left* radius below elbow, then in inner condyle of *right* femur, and next in outer condyle of *left* femur (at once after first dose, forty-fourth day),³¹.—Two or three shudderings and momentary pains in radial condyle of *left* humerus, and outer side of *left* ankle (after first dose, forty-fifth day),³¹.

Superior Extremities. Arms ache at 11 A.M. (third day),¹².—Arms and neck ache severely at 4 P.M. (third day),¹².—**Shoulder.** Slight return of the aching on top of *left* shoulder in muscles above the scapular ridge (twelfth night),³¹.—Very slight pains in *left* shoulder, in the forenoon (fourteenth day and sixteenth night),³¹.—Pain in upper part of *left* shoulder after going to bed (twenty-third night),³¹.—Before going to bed noticed a pain in *left* shoulder, but nearer the neck than formerly (thirtieth day),³¹.—Pain in *left* shoulder (one hour after second dose, thirty-first day),³¹.—[350.] Pain in *left* shoulder and scapula (half an hour after fourth dose, thirty-eighth day),³¹.—Slight aching in *left* shoulder (imme-

diately after fourth dose, forty-sixth day),³¹.—On waking had a great deal of slight shuddering in *right* and *left* shoulders in succession and afterwards in the whole chest, extending into abdomen (twenty-fourth day),³¹.—Shuddering or thrilling throughout the region of left shoulder (twenty-ninth morning),³¹.—In the first half hour, had an aching pain in *left* humerus just above the elbow, which soon changed to the left breast about the nipple; this was very slight and transient; it then returned to the left humerus about the middle; it soon shifted to the left shoulder-joint, and was more permanent there than elsewhere; pain in shoulder-joint went off on eating at 9 P.M. (first day),³¹.—**Arm.** Pain in the humerus above the elbow (twelfth and sixteenth nights),³¹.—The pain in outer condyle of left humerus was protracted (twenty-fourth night),³¹.—Pain in outer condyle of left humerus, in the forenoon (thirty-first day),³¹.—**Elbow.** While riding in omnibus had a pain in *right* elbow, which went up to right scapula (after second dose, second day),³¹.—Felt at once a distinct transient pain at extremity of *right* elbow (after second dose, twelfth day),³¹.—**Forearm.** [360.] This morning a steady ache for a minute or two in middle of *left* ulna (sixteenth day),³¹.—Pain in right ulna, two inches above wrist, in third phalanx of right index finger, in the forenoon (thirty-first day),³¹.—Felt at once the pains at carpal end of right ulna (after fourth dose, thirty-eighth day),³¹.—**Hand and Fingers.** Pain in right pisiform bone (twenty-fourth morning),³¹.—Severe pulsating pains in first joint of right middle finger, of about a minute's duration (two hours after third dose, thirty-first day),³¹.—Before going to bed had two very severe sudden pains at thirty minutes' interval, in first joint of right ring finger (forty-fifth night),³¹.—Aching in second phalanx of right thumb, also in right scapula, in the afternoon and evening (forty sixth day),³¹.

Inferior Extremities. Total loss of locomotion for some hours,²¹.—I went out for a walk; I had not gone far when I experienced a sense of weariness in all the muscles of progression, this feeling particularly referable to the gastrocnemius; however, I cannot altogether attribute this muscular soreness to *Veratrum*, inasmuch as I had taken some active exercise on gymnastics the day before; I remained out for about an hour, and was scarcely able to get home, from muscular weakness; in a few minutes I was obliged to lie down (after three hours),²⁵.—**Hip and Thigh.** Pain in *left* hip-joint, which soon went to the *right*, but was more severe (*left-right*), on waking (third day),³¹.—[370.] On going to bed had a very sudden severe lancinating pain in *right* hip, where the glutei are lost in the thigh (twelfth day and sixteenth night),³¹.—A sudden severe ache in *right* trochanter (immediately after second dose, third day),³¹.—Slight pain in great trochanter, in the forenoon (fourteenth day),³¹.—Pain in left great trochanter and right knee, as well as left; the pains in knees were sometimes simultaneous, sometimes alternate (twenty-fourth night),³¹.—Pain in right great trochanter when lying on right side; on changing to the left the pain also changed to the left great trochanter (thirty-seventh night),³¹.—Pain in inner condyle of left femur (one hour after second dose, thirty-first day),³¹.—**Knee.** Pain in tendons about *left* popliteal space, then in left instep; at same time pain in middle of *right* tibia (after first dose, third day),³¹.—Woke this morning with a kind of throbbing aching in *right* knee, on which he was lying; on turning on left side and rubbing knee, the pain gradually went off; it then came into *left* knee in a milder and less steady form (*right-left*); it then went back to the right, went off while dressing,

but returned and continues now; all day noticed that the pains were apt to come on while limb was in a constrained position; the pain in arm came on when holding something in the hand, and went off on setting it down (eighth day); every night (except one) has had the pain in *right* knee, and always while lying on *right* side (his usual position); it went off on turning and rubbing; slight return of pain in right knee, and in left thigh just above knee, in the evening; on going to bed frequent return of the throbbing aching in right knee, and once in the left (twelfth day),³¹.—Aching in *right* knee, about inner condyle of femur; the pain soon extended to inner middle of thigh; the pain wanders to the front of the thigh and above the knee; the inner condyle of *left* femur begins to be similarly affected (*right-left*); also the inner condyle of *left* humerus and *left* instep; the pains then seemed all to settle in *right* ankle outside (fourteenth day); pain in right knee felt on waking; this morning, slight pain in right knee and ankle (fifteenth day); above left knee (sixteenth night),³¹.—**Leg.** Slight spasmodic contraction of the muscles of the leg (after half an hour),¹⁰.—[380.] Cramps in the leg,¹⁴.—Slight tendency to cramp on touching legs,¹¹.—Same paralyzed sensation in extensors of feet,^{3b}.—An unmistakable tendency to cramp existed in my legs when touched or moved,²⁵.—Aching in inner condyle of *left* tibia, and in head of *left* fibula (half an hour after first dose), (twenty-fourth day),³¹.—Aching in *left* tibia about middle, for a minute or two (one hour after second dose, first day); while sitting (second day),³¹.—Slight return of aching in middle of left tibia (twelfth night),³¹.—Pain in lower third of left tibia (immediately after fourth dose, thirty-first day),³¹.—Pain in right tibia and ankle, in the afternoon (thirty-eighth day),³¹.—Pains in left tibia at top of lower third, and then at lower part of left calf (two hours after second dose, thirty-eighth day),³¹.—[390.] Woke with violent cramps in both calves (fifth morning),³¹.—Aching in back of right leg, two or three inches above the ankle, seemingly in the flexors of great toe, as it was increased by moving the toe (forty-fourth night),³¹.—Continual drawing in right calf, while walking (forty-fifth day),³¹.—**Ankle.** A sharp steady pain about middle of left instep towards inside, going off gradually in about a minute (after second dose, twelfth day),³¹.—A feeling of dislocation in *right* ankle, so severe as to make walking almost impossible (he has in former years had such a pain occasionally, very seldom of late, except when taking high potencies of Causticum five or six weeks ago; the peculiarity just now is the extreme severity of the pain on attempting to walk); this pain on walking lasted more or less severe all day (twelfth day); returned in the afternoon (fourteenth day),³¹.—Aching in left inner malleolus, right knee, etc. (twenty-ninth morning),³¹.—While eating (9 P.M.) a distinct aching in bend of *left* foot inside (fifteen minutes after fifth dose, second day),³¹.—**Foot and Toes.** While on his right side (his usual posture) had a pain on the right side of the sole of the left foot; had the same before under the same circumstances (twenty-fourth night),³¹.—Pain in second phalanx of left great toe, and a sprained feeling in left knee at inner condyle of femur on walking (forty-fifth day),³¹.

Generalities.—Occasionally extreme pallor, with syncope, generally brought on from rising suddenly from the recumbent position,²⁷.—[400.] Tremor,¹⁵.—**She went into a spasm, with violent shrieks*; body bent backwards; arms rigid and thrown up over her head; face dark blue; breathing suspended for several seconds; lasted about two minutes; remained easier for a few minutes, and then went into another spasm, similar to the first,¹⁵.—Inability to control the voluntary muscles,³.—Muscular action was

not constantly interrupted, this effect occurring only after considerable exercise, as walking or jumping.^{3c}—Clothes would not fit me, seemed as if they were scratching me somewhere and I could not relieve myself; constant twitching of different parts of body, trying to relieve the rubbing sensation (seventh day),³⁸—My clothes did not fit well, they irritated wherever they touched; would keep twitching and it seemed almost impossible to keep still, especially when sitting (third day),^{40a}—At 7 P.M. felt weak, especially in lower extremities, with heavy dull pain in head (first day),⁴¹—Very weak, with trembling all over, at 1 P.M. (third day),⁴²—Loss of strength (after three hours and a half): general weakness (second day),⁴⁰—Weakness throughout the body (after four hours),⁴⁶—[410.] Considerable fatigue of the muscles (first day),⁴—Lassitude (after three hours),⁷—A general feeling of languor and quietness; a sense of exertion on going upstairs (after thirty-five minutes); decided feeling of weakness (after five hours and a half); any exertion an effort (after six hours),³⁰—Indescribable feeling of lassitude and weakness in the limbs (after six hours and a half),⁴⁸—Prostration,⁴⁴, etc.—Great prostration (first day),^{1, 2}, etc.—Sudden prostration and vertigo,³⁴—The system becomes completely relaxed,²⁷—So very much prostration was produced by it that death appeared imminent; the stimulants were poured into the patient, and on the second day he rallied,³⁶—Faintness,²—[420.] Collapse with the vomiting (first and second days),^{42a}—An intelligent colored laborer, thirty years of age, contracted a cold during the month of January last, from the effects of which he suffered considerably. He told me that for several mornings preceding the accident, which I will relate, he arose with a dull headache; was feverish; his nostrils were stuffy; he suffered with pains in the muscles of the chest and back; had a very annoying cough, with expectoration of frothy and tenacious mucus, characteristic of the first stages of catarrhal inflammation. The “dry” cough after a few days gave place to a moist one, by which a loose secretion was readily thrown off. He took the medicine about 3 P.M., February 5th. I was called to see him at 1 A.M. following, and found him in a condition approaching collapse. He was bathed in cold perspiration, vomiting at intervals of three and five minutes; heart acting feebly, almost inaudibly; pulse at the wrist making sixteen beats per minute. After I had been in the room a few minutes, he summoned sufficient energy to speak, and complained of pain over the precordia, muscular cramps of the lower extremities, and a peculiar sensation of faintness. He was so feeble that I could scarcely hear him articulate. On inquiring what he had been taking, he replied, “Nothing but a cough mixture.” I found its composition to be as follows: Tinct. Am. hellebore, tinct. lobelia, syrup of squills, and simple syrup, two and a half drachms each of the tincture, one ounce of syrup of squills, and two ounces of simple syrup. The directions were a teaspoonful three times daily, which would give him five drops of the tincture of *Veratrum viride* at each dose. He had taken it, however, in teaspoonful doses every half hour, until the contents of the vial were exhausted, which had occurred at 10 P.M. At this time he began to feel very weak and sick, as he expressed it, and went to bed and to sleep. At about 11½ o’clock he was awakened by a great rush of fluids from the mouth. The vomiting was without warning or effort, and for a time was almost continuous. Feeling so strange about the head, and so faint that he thought he would die, he tried to awaken a boy, who slept in an adjoining room, by calling, but could not do so. He tried to get out of bed, but his legs failed him. After the lapse of half an hour he suc-

ceeded in crawling to the boy, and making his wishes known "to go and bring the doctor." I reached him at 1 A.M., and found him in the condition already described. I gave him a hypodermic injection of one-half grain of morphia, applied mustard to the epigastrium, the nucha, the spinal column, the wrists and ankles, and gave him *per rectum*, one ounce of whiskey with two grains of quinine. As I observed him, there would occur at intervals of four or five minutes a regurgitation of a mouthful of fluid, resembling the albumen of egg; his eyes were rolled under the orbits, so that the sclerotics only were visible; the sighing was frequent and profound; and the pulse was proportionately less than the breathing, the perversion being to the extent of twenty to thirty respirations, which were shallow. In twenty minutes' time I could plainly see that the remedies which I had administered were having good effect upon him. The vomiting ceased, the skin became warmer, and the perspiration less copious; the sighing gave place to easy respiration, the heart became steady, the pulse rose gradually in frequency and volume. A feeling of repose replaced the nervous agitation which had possessed him, and prior to my leaving him the pulse respiration ratio did not differ markedly from that of health. I left him at 2½ A.M., ordering his attendant to inject one ounce of diluted whiskey into the bowel at the end of an hour. On visiting him next morning, he complained of slight headache and nausea, with dryness of the mouth. The heart was acting with almost its accustomed force and frequency. He recovered promptly from the effects of the *Veratrum viride*, but his cough persisted, and he is now suffering with that bane of his race, mesenteric plithisis.³¹—Great distress (after half an hour).²⁴—Severe agues.⁴—On waking in morning, shuddering for some time, with pains in the joints till he fell asleep; on waking, felt the shuddering again, but did not notice any chilliness (seventh day); woke this morning with the shuddering, with a kind of throbbing aching in *right* knee, on which he was lying (eighth day).³¹—Between 5 and 6 P.M., had flying aches in different parts, recurring repeatedly, in left thorax, in right shoulder over clavicle, in head of left tibia and three or four inches above the same, in tendons of right popliteal space, in outside of right arm and left ulna, right wrist, head of left radius, back of first joint of left middle finger, and second phalanx of left great toe (one hour and three-quarters after second dose, twenty-fourth day).³¹—A transient ache in second joint of right forefinger, then distinct pain in right angle of lower jaw, then in left heel, then in middle of left neck, then at the same time in right heel and left knee; these in the first thirty minutes after the dose (third dose, thirtieth day).¹³—A cup of hot strong coffee did more good than anything else.²⁶—The symptoms most frequently occur early in the morning, on waking (twenty-seventh day).³¹—During afternoon and evening had the more common symptoms, especially in evening (thirty-second day).³¹

Skin.—[430.] Peculiar sensation in the skin (first day).¹—Itching in right mastoid process and inside of left thigh, at the middle (before third dose dissolved); itching in first joint of left thumb, in left ala nasi, in left cartilage of nose, in left upper lip just under ala nasi, in left ear (after fourth dose); itching below corner of mouth (after second dose, forty-fifth day).³¹—After going to bed, had itching of right eyebrow, in right ala nasi, and in left malar prominence (twenty-fifth night).³¹—An itching which he had felt several times before at the line between *right* ala nasi and face (sixteenth and twenty-third nights).³¹—After going to bed had the itching, *first in right, then in left* side of ala nasi (thirty-first day).³¹—The

itching on right ala nasi was very distinct, while lying on right side, and changed to left ala when he turned over on to the left side (thirty-seventh night),³¹.—Itching in left malar prominence, in orifice of left ear and left groin, in bed (first night),³¹.—Itching in left malar prominence (twenty-ninth morning),³¹.—After going to bed itching in left malar prominence, and about the line of the ala nasi and cheek (thirtieth day),³¹.—Itching in right malar region (thirty-fourth night),³¹.—[440.] Itching at once in right malar prominence (after fourth dose, thirty-eighth day),³¹.—Very distinct itching and crawling in left malar prominence (at once, after first dose, forty-fourth day),³¹.—Itching in left malar prominence, etc. (after second dose, forty-sixth day),³¹.—Itching in left side of neck, about the middle of the sterno-mastoid (twenty-fourth night),³¹.—Intense, painful itching in back of first joint of left index finger; it was precisely limited to the line of the joint, like the edge of a dissecting knife; had the feeling before in the same joint, and the corresponding joint of the finger next it, on going to bed (twenty-fourth night),³¹.—After going to bed, had the itching in right ala nasi, then a stinging pain in right jugum of malar; was obliged to rub the spot, when the pain went off; afterwards felt the itching in left ala nasi (forty-fourth night),³¹.

Sleep.—Very sleepy (third day),³⁸.—Somnolency,².—Slept but little during the night; restless (first night),³⁹.—Did not sleep well during the night (third night),⁴⁰.—[450.] Slept very poorly during the night (first night),⁴¹.—Slept well, but had frightful dreams of being on the water (first night); had a restless night; frightful dreams of people drowning (second day); sleep sound; frightful dreams of the water, as usual (third night),⁴².—*Dreamed of water*, and had much lively dreaming, in which he was continually provoked and baffled (twelfth night),³¹.—An odd dream, in which the Atlantic figured largely (nineteenth day),³¹.—Dreamed about water (several nights),³¹.—Much dreaming, but not of water (twenty-fifth night); at midnight much dreaming of water, fishing, etc. (twenty-sixth night),³¹.

Fever.—Chilliness. Chilliness,³.—Chills and coldness of the body,⁴ but moisture of the skin,².—A shuddering, twice during the night, towards morning (fourteenth night),³¹.—After five hours, attacked by one or two cold shivers. My hands and feet became cold and benumbed, though there was a large fire blazing in the grate. The cold numb feeling crept up my legs and arms, and at last my whole body felt as if enveloped in cold damp clothing, and I became quite prostrate,¹⁷.—[460.] During the greatest depression he complained of being very cold, and his limbs were bathed with a cold perspiration,³⁴.—General coldness of the body (after three hours and a half),^{10 39a}.—Felt cold in the morning, after being up half an hour (third day),³⁸.—Skin cold, and covered with a profuse clammy sweat,¹¹.—Skin cool (first day),¹.—Cold extremities,^{4 23 25}.—Extremities cold as far as the elbows and knees (after half an hour),²⁴.—At 6 P.M., feet and hands cold, with frontal headache (second day),⁴¹.—Hands and feet cold,¹³.—Feet cold and chilly, with pressing pain in eyes (first day),⁴¹.—**Heat.** [470.] Slight heat of body and cold sweat of forehead (first day),⁴¹.—Heat of the surface followed the dizziness and nausea; icy coldness followed the heat (fourth day),^{40c}.—Skin of head hot and moist (second day),⁴¹.—**Sweat.** General perspiration,¹⁰.—**Profuse diaphoresis and sense of utter prostration* (after third dose),⁷.—Colliquative sweats,⁴.—**Free perspiration and cool surface*,²⁷.—(Cold sweat with the vomiting), (first and second days),^{42a}.—**Bathed in cold perspiration*,^{22 23}.—The cold sweat was fearful,¹⁶.—[480.] Cold perspiration pouring off me for a quarter of an hour (after four hours),²⁵.

—Clammy cold sweat on brow (after four hours),¹⁷.—Profuse cold perspiration over the hands and face (after half an hour),²⁴.

Conditions.—**Aggravation.**—(*Morning*). On rising, vertigo; photophobia; on waking, most symptoms.—(*Evening*). Most symptoms.—(*Lying down*). Headache.—(*Motion*). Headache; tearing pain in stomach; aching in neck.—(*Noise*). Headache.—(*Stooping*). Heavy feeling over left eye.

Amelioration.—(*Bending forward*). Cramp in stomach.—(*Closing eyes*). Vertigo and photophobia.

VERBASCUM.

Verbascum thapsus, Linn.

Natural order, Scrophulariaceæ.

Common names, Mullein; (G.), Königs-kerze; (F.), Molène.

Preparation, Tincture of the fresh herb at commencement of flowering.

Authorities. (Nos. 1 to 5, from Hahnemann, R. A. M. L., 5.) 1, Hahnemann; 2, Gross; 3, Hartmann; 4, Langhammer; 5, Mossdarf; 6, Butler, Provincial Med. and Surg. Journ., 1843, vol. vi, p. 89, experiments on healthy individuals, with doses of $\frac{1}{2}$ to 2 drachms of tincture of dried leaves of either *V. nigrum* or *Blattaria* or both; daily limit, between 30 and 40 ounces.

Mind.—Excited fantasies, especially of a sensual nature, for several days.¹.—Excessive joyfulness with laughter (after two hours and a half).³.—Depressed all day, all his efforts and hopes seem unavailing.⁴.—Anxious mood all day; more lively towards evening.⁴.—Very fretful and morose mood without cause; but with desire and inclination for work; also he finds satisfaction in having people about him and in talking with them (after two hours and a half).³.—Indifferent to things to which he is usually attentive (after four hours).⁵.—Disinclination for work (after eight hours).³.—Distraction of mind; different trains of thought and fantasies, throng upon him (after eight days).¹.—Diminished memory; it was with great difficulty that he could recall the thoughts he had just had (after four hours).⁵.—[10.] The narcotic effects usually wore off in one or two hours.⁶.

Head.—Sudden vertigo, as from a pressure upon the middle of the whole head.².—*Attacks of vertigo on pressing the left cheek, while supporting the head*.².—Dulness of the head (after five hours).⁵.—Dull painful heaviness of the head (after three-quarters of an hour).¹.—His head is dull and confused, as if everything would press out at the forehead.¹.—Slight sense of weight about the head, with vertigo, often to a considerable extent, but at the same time somewhat pleasurable.⁶.—Tingling in the head, while walking (after four hours and a half).⁵.—**Forehead.** Intermittent pressure and beating near the left frontal eminence.².—Violent pressure in the whole forehead.².—[20.] Violent pressing pain extending from within outward, in the forehead, disappearing on stooping (after two hours and a half).³.—Violent stupefying pressure deep in the right frontal eminence on going from the cold into warmth.².—*Pressing benumbing headache rather external, especially in the forehead, in every position* (after three-quarters of an hour).⁴.—Pressing stupefying headache, especially affecting both sides of the forehead, in every position (after half an hour).⁴.—Violent pressing inward in the left side of the frontal bone, like a benumbing.².—Incessant pressure from within outward, in the forehead, especially between the eyebrows (after three hours).³.—Benumbing drawing in the left frontal emi-

nence in a draught of air (after seventy-two hours),².—Slow hammering in the left frontal eminence, immediately,².—Violent slowly appearing and disappearing stitch extending from within outward in the left frontal eminence (after two hours),³.—Deep, sharp, intermittent stitches between the left frontal eminence and the parietal eminence,².—[30.] Intermittent fine needlelike stitches in the left side of the forehead (after one hour and three-quarters),⁴.—Sticking in the left frontal sinus (after five hours),⁵.—

Temples. *Dull pressure in the articular eminences of the temporal bone, just in front of the left ear,².—Dull pressure in the articular eminence of the temporal bone painfully aggravated on biting the teeth together,².—*Sensation as if both articular eminences of the temporal bone were violently pinched and crushed together with pincers,².—A pressing pain in the right temple, immediately¹.—Pressure from behind forward, in the left temple,¹.—*Sensation as if the temples were pinched together with pincers,².—

*Benumbing sticking piercing deeply in the right temple while eating, aggravated by external pressure, after a few hours it extended into the upper teeth of the same side like a tearing,².—Sharp, benumbing, knifelike stitches just above the right temple,².—[40.] Burning and prickling in the left temple (after eight minutes),².—Sticking jerking externally, first in the left temple, afterwards in the right (after one hour),⁵.—**Vertex and Parietals.**

Tension in the left side of the vertex, which gradually becomes a sharp pressure, at the same time the left ramus of the lower jaw seems pressed against the upper jaw,².—Pressing headache on the crown,¹.—Violent pressing, but very transient pain, extending from within outward in the whole right half of the brain, which gradually diminishes (after four hours),³.—Tearing pressure in the right half of the brain (after four hours),³.—Benumbing pressure in the whole left side of the head and face (cheek),².—Jerking pressure in the left half of the brain (after five hours),⁵.—Pressing, long-drawn stitch from behind forward, through the left hemisphere of the brain (after two hours),³.—Violent intermittent deep sticking behind the left parietal eminence,².—**Occiput.** [50.] Pressing pain in the occiput (after an eighth of an hour),¹.—Violent pressure in the right occipital protuberance (after four hours and a half),³.—Stitch in the left side of the occiput (after one hour and a half),¹.

Eye.—Heat in the eyes and sensation of contraction of the orbits (after half an hour),¹.—Pain more pressing than tearing above the left orbit (after two hours and a quarter),³.—Pupils dilated (after seven hours and a half),⁴.—Dimness of sight,⁶.—A short-sighted person becomes still more short-sighted (dimness of vision ?); could scarcely recognize objects a yard away, on account of watery dimness of vision; objects seem indistinct and enlarged, and the daylight seems less bright than usual, which is not the case (after eight hours and a half),⁴.

Ear.—Sudden pressure, associated with a violent stitch behind the right ear, which gradually disappears (after three-quarters of an hour),³.—*Feeling of numbness in the left ear,².—[60.] *Painful tearing and drawing in the left ear, extending inward,².—*Sensation as if the left ear would be drawn inward,².—Violent tearing within the right ear,².—Tearing stitches in front of the left ear extending downward, immediately,¹.—A tearing stitch in the left ear (while eating), (after two hours),¹.—*Sensation as if something stopped the ears, first the left, then the right,².

Nose.—Sensation of stoppage of the nose, larynx, and ears, which, however, does not affect the hearing, while reading aloud (after eight hours),⁴.

Face.—Face pallid, after large doses,⁶.—**The whole cheek becomes involved in a dull pressure in the left articulation of the jaw, and on pressure becomes a benumbing tension.*².—**Sensation as if one were violently pressing upon the left malar bone as far as the ear, aggravated by pressure with the hand, frequently during the day, in the evening before going to bed, and in the morning on waking.*².—[70.] **Tension in the left malar bone, in the articular elevation of the temporal bone, and in the frontal eminence, on going into the open air and in a draught of air.*².—Violent pressure on the right malar bone (after thirty-six hours)².—**Benumbing, intermittent pressure on the upper margin of the left malar bone.*².—**Dull pressing-sticking sensation in the left zygoma (after two hours and a half).*³.—Intermittent frightful sticking in the left malar bone.².—**Violent tension in the integuments of the chin, masseter muscles, and throat, but the jaws can be moved easily (after ten minutes).*².—**Pressing pinching pain on the right side of the lower jaw (after half an hour).*².

Mouth.—Intermittent tearing in the small molars of the left lower jaw.².—Tearing in the large molars of the right lower jaw.².—*The root of the tongue is brown, without bad taste, in the morning on rising and in the forenoon.*².—[80.] Root of the tongue brown, with a flat, nauseous taste, in the forenoon.².—Tongue brownish yellow, coated with tenacious mucus, without a bad taste, immediately after dinner.².—(Salt water collects in the mouth).¹.—Flat taste for some time after dinner.².—Flat taste with an offensive odor to the breath, with a brownish-yellow coated tongue, in the morning (after ninety-six hours).².

Stomach.—Appetite and Thirst. Hunger without appetite through the day; nothing is relished, and yet he wishes to eat.².—Unquenchable thirst (after two hours and a half).³.—**Eructions.** Many empty eructations.¹.—Bitter qualmish eructations, immediately.³.—Uprising of tasteless liquid (after five minutes).³.—[90.] Empty eructations, immediately.⁴.—**Hiccough.** Hiccough (after half an hour).¹.—*Frequent hiccough* (after two hours and a quarter).⁴.—Pressure in the stomach.¹.—Sensation of great emptiness in the pit of the stomach, which disappeared with a rumbling in the region below the left ribs.³.

Abdomen.—Hypochondrium. Sticking pinching beneath the right hypochondrium (after half an hour).³.—**Umbilicus and Sides.** Constriction of the abdomen at the umbilical region at various times.².—Sensation as if the intestines at the umbilicus were adherent to the wall of the abdomen and were being torn away forcibly, aggravated by external pressure.².—*Hard painful pressure as from a stone upon the umbilicus, aggravated by stooping.*².—Stitches as from many needles in the whole umbilical region around to the back, and even in the dorsal vertebrae, on deep inspiration and on stooping.².—[100.] Incessant rumbling and gurgling in the region beneath the left ribs (after five hours).³.—Intermittent dull sticking in the left side beneath the navel, aggravated on bending the body forward after eating (after three hours).².—Intermittent dull needle stitches in the right side, by the navel.².—Sharp intermittent stitches in the left side above the navel.².—A deep sharp stitch in the left side, where the ribs cease, so violent that he started.².—**General Abdomen.** Abdomen tympanitic, followed by frequent rumbling in the region beneath the left ribs, which caused several violent loud eructations (after four hours).³.—Gripping in the abdomen as from incarcerated flatus, in every position (after one hour and three-quarters).⁴.—Cutting-gripping colic, here and there, though always rising towards the ribs, where it becomes seated (after three

hours).³—Cutting gripping in the whole abdomen, with frequent eructations.³—A pain in the abdomen, extending low down, causing spasmodic contraction of the sphincter ani and a transient desire for stool.³—[110.] Tearing sticking in the abdomen, extending downward.¹—Gurgling in the lower abdomen (after a quarter of an hour).²—Acute, deep, knifelike stitches in the right side of the lower abdomen, above the pubis.²

• **Stool.**—Soft stool, with straining (after three hours).¹—Evacuation of scanty faeces in small hard masses, like sheep-dung, with pressure (after fifteen hours).⁴—The bowels were invariably somewhat relaxed.⁴—No stool (first day).⁵

Urinary Organs.—Frequent desire to urinate; a large quantity of urine is passed (after two hours).¹—Frequent desire to urinate, with scanty discharge (after seven hours).⁴—*Very frequently obliged to pass much urine* (after half an hour): *on unusually small amount is passed* (after thirty-six hours).³—[120.] The urine passed within ten minutes of taking the medicine always had the odor of Verbascum, and a considerable tendency to diuresis remained subsequently. In several careful series of observations there was found an increase in the bulk of the urine of from 15 to 50 per cent., from moderate doses; in one instance, the quantity of urine, after taking the drug for two days, rose from 47½ ounces to 57 ounces, 6 drachms; and the two subsequent days, the medicine being omitted, it fell to 40 ounces.⁵

Sexual Organs.—Emissions at night.¹—Nightly emission, without lascivious dream.⁴

Respiratory Organs.—Hoarseness on reading aloud.⁴

Chest.—Invariably pain and oppression at the chest, with disinclination to frequent breathing.⁶—Painful tension across the chest, with stitches in the region of the heart, immediately after lying down in bed in the evening.¹—Intermittent, benumbing, frightful cutting near the left side of the ensiform cartilage, below the last ribs.²—Sharp pressure just beneath the left nipple.²—Intermittent dull needlelike stitches near the left side of the ensiform cartilage.²—A benumbing oppressive stitch taking away the breath, in the region of the first and second costal cartilages (after five minutes).²—[130.] Pressing-sticking pain in the next to the last rib where it passes into the cartilage, suddenly disappearing on external pressure, but immediately returning.²—Violent stitch on inspiration several times, beneath the left nipple, which slowly disappeared, but which always returned on deep inspiration (after four hours).³

Heart and Pulse.—According to the state of the system the pulse was more or less readily reduced in number and force, especially in the latter.⁶

Back.—Sharp intermittent stitches in the left scapula.²—A very fine persistent stitch in the last dorsal vertebra, on sitting bent over (after half an hour).³—In the middle between the right loin and spine, intermittent deep, sharp, knifelike stitches, quite internal in the intestines.²

• **Extremities.**—Stretching in the limbs (after half an hour).¹ •

Superior Extremities.—Pain on the top of the shoulder, pressing rather than tearing, disappearing on motion (after five hours and a half).³—Cramplike pressure in the left elbow, extending into the forearm, in every position (after three hours and a half).⁴—Tearing extending downward, in the left ulna.¹—[140.] Tensive pain in the left wrist, during rest and motion (after twenty minutes).¹—Pain on the back of the right hand, pressing rather than tearing (after one hour).³—Cramplike pressure, now

in the right, now in the left metacarpus on moving the arm, disappearing during rest (after two hours and a quarter),⁴.—Pain on the outer side of the metacarpal bone of both little fingers, as from a bruise, only noticed on touch,².—Violent sticking, as with a dull knife, in the thick flesh between the metacarpal bone of the right thumb and in the index finger,².—Tearing sticking in the palm of the hand,¹.—Dull sticking in the external condyle of the palm,².—Numbness and insensibility of the thumb,¹.†—Cramplike pressure in the first phalanx of the right thumb, disappearing on motion (after seven hours),⁴.—Paralytic pain in the left fingers, especially in their metacarpal joints,².—[150.] Paralytic drawing in the whole of the left index finger,².—*Some dull stitches in the joint where the carpal bone of the thumb articulates with the radius, like a kind of sprain (or numbness)*,³.—Violent picking (intermittent dull stitches) in the middle joint of the index finger,².—Violent tearing stitch through the whole of the left little finger (after four hours),².—Sharp sticking in the first phalanx of the left thumb,².—Violent dull intermittent sticking in the last phalanx of the index finger; on moving the finger the pain extended into the first joint,².

Inferior Extremities.—Gait tottering, while walking in the open air, as if the limbs could not support the body on account of weakness (after four hours),⁴.—Weariness of the lower extremities (after five hours and a half),⁵.—Very great heaviness in the lower extremities, as if a weight were hanging upon them, on going up and downstairs (after two hours),³.—While riding the right thigh over the left, weakness and sensation of weariness in the bone of the right thigh, not noticed on walking (after three hours and a half),³.—[160.] Paralytic pain on the inner side of the right thigh, while the leg is drawn up in a sitting position; on stooping the pain extended towards the knee, painful like a sticking,².—Drawing pressing sensation, extending from the middle of the right thigh to the knee, while sitting (after three hours),³.—*A cramplike pain in the muscles of the right thigh, while walking in the open air* (after four hours and a half),⁴.—A pressing cramplike pain in the muscles above the right knee, while sitting and standing (after three-quarters of an hour),³.—Dull stitches just above the left patella, only on stepping on it (after twenty-four hours),².—The knees tremble as if one had received a great fright (after two hours and a half),³.—*Sudden pain through the right knee, while standing, sitting, and walking* (after thirty-six hours),³.—Tearing from above downward in the leg,¹.—Cramplike pressure on the left leg near the ankle (after two hours and a quarter),⁴.—*A cramplike pressure in the sole of the right foot, while standing, which disappears on walking* (after two hours and a half),⁴.—[170.] Violent intermittent dull sticking in the metatarsal bones of the great and adjacent toes of the left foot, during rest,².

Generalities.—Sensation of sinking,⁶.—Indolence and sleepiness in the morning after rising,².

Skin.—Pimple on the cheek in front of the right ear, with stinging pain when touched (after twenty-four hours),¹.—A large red pimple on the neck near the thyroid cartilage, painful on pressure, lasting two or three days (after two days),¹.—Itching on the forearm (after three-quarters of an hour),¹.—Itching, crawling tickling on the side of the left middle finger, provoking scratching (after three hours and a quarter),⁴.

Sleep.—Frequent yawning and stretching, as though he had not slept enough (after two hours),⁴.—He cannot keep awake immediately after din-

† From the external application of the juice.—HAINEMANN.

ner, the lids close (after seven hours),⁵.—More or less inclination to sleep,⁶. —[180.] Sleep only till 4 A.M., filled with dreams of war and of corpses, several nights,¹.—Restless sleep at night, he tosses from side to side,⁴.

Fever.—Shivering, especially^{*} over one side of the body, from the shoulder to the thigh, as if cold water were poured over it,¹.—Slight transient coldness over the whole body, even perceptible externally, on the hands and feet,².—When the doses were large, the extremities became cold and the face pallid,⁶.

Conditions.—**Aggravation.**—(*Bending body forward*), Sticking in left side of navel.—(*Biting teeth together*), Pressure in articular eminences of temporal bones.—(*Going from cold into warmth*), Pressure in right frontal eminence.—(*Deep inspiration*), Stitches in umbilical region.—(*Motion*), Pressure in metacarpus.—(*Pressing left cheek while supporting head*), Vertigo.—(*Pressure*), Sticking in right temple; pressure on left malar bone; sensation in abdomen.—(*Sleeping*), Pressure upon umbilicus, stitches in umbilical region.

Amelioration.—(*Motion*), Pain on shoulder.—(*Sleeping*), Pressing from within outward in forehead.^{*}

VESPA.

Vespa crabo, Hornet, (F.), Guepe-frelon.

Vespa vulgaris, Wasp.

Order, Hymenoptera.

Sub-order, Vespidae.

Preparation, Tincture.

Authorities. (1 to 5 wasp stings, from Hering, Amer. Arz.). **1**, Gaz. des Sante, 1776, sting in the mouth; **2**, Bibliothèque Med., 1819; **3**, effects of sting; **4**, Hildanus; **5**, Lazonus; **6**, Dr. Dufresne, Bibliothèque Hom. de Geneva, vol. ii, took at once on the tongue the poison obtained from **6** of the *Vespa crabo*; **7**, Jas. Mease, M.D. (letter from Dr. Wiley), Amer. Journ. Med. Sci., 1836 (2), p. 266, a man was stung in the throat by a wasp, and died in twenty-four hours; **8**, Boston Galaxy (ibid.), a man was stung on the right middle finger by a *yellow wasp*, and died in twenty minutes; **9**, David Rice, M.D., Bost. Med. and Surg. Journ., vol. lvii, 1857, p. 298, a girl, æt. thirteen years, was stung by two or three *wasps* on the right shoulder, and also on the right middle finger; **10**, Dr. A. R., A. H. Z., 79, p. 47, a woman was stung on the palate by a *wasp*; **11**, Fisher, ibid., p. 95, effects of a sting of a *wasp* on the tongue; **12**, C. W. Boyce, M.D., Amer. Hom. Rev., vol. iii, 1862, p. 192, a boy, æt. sixteen years, sickly, has always had scrofula, has had caries of the bones, severe rheumatism, and suppurating glands, for a few years has been better, was stung on the hand by a *yellow jacket*, took Apis θ , a drop every four hours; **13**, Henry M. Madge, Lancet, 1864 (2), p. 509, a woman was stung by *wasps* on the inner side of the right cheek, and far back on the same side of the tongue; **14**, Dr. Flint, Month. Hom. Rev., vol. xiii, 1869, p. 607, a boy, æt. five and a half years, suffering from chronic thickening of the Schneiderian membrane, was stung by a wasp on left thumb; **15**, Med. Press and Circular (ibid.), a man was stung on the left wrist and left eyebrow; **16**, Huvelka, Bull. de la Soc. Med. Hom. de France, July 1st, 1870 (Raue's Record, 1872, p. 36), sting of wasp on a finger; **17**, P. Disbro, M.D., Ohio Med. and Surg. Rep., vol. v, 1871, p. 347, effects of the sting of a *yellow*

jacket on the lip; **18**, M. L. Catron, M.D., Med. and Surg. Rep., vol. xxiv, 1871, p. 66, the author was stung by a *red wasp*, twice, in or near the right submaxillary gland; **19**, Wm. Odell, Lancet, 1873 (2), p. 333, Thomas M., æt. seventy-four years, died from a sting on the tongue; **20**, Berridge, North Amer. Journ. of Hom., New Ser., vol. iii, 1872, p. 100, Miss —, was stung on right side of neck by a *wasp*; **20 a**, the same person was stung the next year in the ball of the right thumb, about 3 P.M.; (21 to 23, Berridge, Med. Invest., vol. i, New Ser., 1875, p. 100, the stings were pulled out of the largest *hornets* when alive, crushed with sugar of milk and alcohol poured over them); **21**, Miss —, took 10 drops 30th in water at 12.50 P.M.; **22**, Miss —, took same; **23**, Mr. —, took 20 drops 30th at 2 P.M.; **24**, Edward Blake, M.D., Month. Hom. Rev., vol. xix, 1875, p. 418, Miss C. J., prone to constipation all her life, had "congestion of left lung" at twenty-three years of age, when thirty-one, she was stung on the left hand by a *wasp* through some calico, from which time she never enjoyed health, and died at the age of thirty-eight years; **25**, Dr. Fuller, Vineland, N. J., copied from MS., a person suffering from polyuria, etc., after living in a malarious country, hard work, and great exhaustion, took tincture of *Vespa maculat.*; the polyuria was cured.

Mind.—Low-spirited (first and second days),⁸.—Insensibility,⁸.—Soon loss of consciousness, with inability to move,².

Eye.—In the evening complained of itching of the right eyelid, and there was very slight tumefaction (second day); eyelids more swollen and somewhat painful (third day); swelling increased, and there was considerable pain in the eyeball (fourth day); pain in the lids and through the eyeball very severe all night (fourth night); lids greatly tumefied, with what seemed to be erysipelatous inflammation; the whole side of the face painful and swollen; upon opening the eyelid, discovered almost complete chemosis of the conjunctiva, it being raised up on the sclerotic membrane, more than half over the eye to the border of the cornea, as if a fatty matter were underneath it, caused by the effusion of lymph (fifth day); an abscess opened upon the inside of the upper eyelid about its centre (sixth day); swelling began to abate, and the chemosis to flatten down, assuming instead of a semitransparent, a reddish hue, as in common ophthalmia; discharge from the abscess profuse (seventh day); in fourteen days chemosis entirely disappeared,⁹.—Itching of the eyelids, which were adherent in the morning (after five years),²¹.—Injection of conjunctiva of right eye,¹⁶.

Ear.—Subdued stitchlike pain deep in right ear for a few seconds (after two hours and a half),²³.

Face.—Anxious countenance (in two hours),¹³.—Countenance livid,⁸.—**[10.]** Face smooth, dark red, and bloated,¹⁷.—Occasional facial neuralgia (after five years),²¹.

Mouth.—Inflammation and swelling of the mouth, so preventing respiration that he died,¹.—The tongue was very red, greatly swollen, and rounded in form. She could not move it about or protrude it. It appeared to entirely fill the mouth. She could not speak, only mumbled, and the act of swallowing was painful and difficult (after twenty minutes),¹³.—Swelling of the tongue; in three hours it was very much swollen and quite tense; there was considerable swelling immediately below the chin, between that and the hyoid bone; pain referred to a point in the middle line of the tongue, about three-quarters of an inch from the apex; the patient could protrude his tongue, and answered questions quite distinctly; the pharynx was apparently not obstructed by the swelling,¹⁹.—

The pain was burning and stinging, extremely violent; after a quarter of an hour the tongue became terribly swollen, so that I could scarcely speak, relieved by Apis,¹¹.—The pain for a minute or two was intense, immediately followed by a peculiar taste, which can only be described by saying that it was a singular combination of palatal and nasal sensation, such as is noticed when a nest of these wasps is disturbed, and they dart about through the air; for a week it was constant and very annoying; it then became intermittent, but very pungent whenever I was heated by exercise or approached a hot fire.¹⁸

Throat.—Throat greatly swelled,⁷.—Sore throat,¹⁷.—Her throat always troubled her, the tonsils repeatedly becoming inflamed,²⁴.—[20.] Sensation of heat in the throat, soon,⁹.—She had an attack which her doctor called "congestion of the living membrane in the throat and chest" (after several months),²⁴.—Hypertrophied tonsils, which secreted a cheesy matter (after five years),²⁴.—Pharyngeal varicosis (after five years),²⁴.

Stomach.—Eructations (after one hour),⁶.—Nausea,¹⁷.—Nausea, with faint feeling and trembling (second, third, and fourth days),²¹.—Vomited freely,¹⁵.—Vomiting, which brought some temporary relief,²⁴.—Feeling as if he had had nothing to eat. This is not unusual, as he seldom cared about his supper (after six hours and a half),²¹.—[30.] Indigestion, with flushing after food (after five years),²⁴.—Heat in the stomach (after one hour),⁶.—Directly had cold feeling in stomach, which lasted all day (coldness less, second day),²¹.—In evening, after coming indoors, weight in stomach, with nausea (first day),²¹.—A little gastro-enteric irritation for a few days before death, combined with an extremely irritable and rapid action of the heart,²⁴.

Abdomen.—Marked tenderness on deep pressure on both renal regions (after five years),²⁴.—A painful spot near the gall-bladder (after five years),²⁴.—Flatulence discharged both upwards and downwards (after five years),²⁴.—Uneasiness in bowels,⁸.—The irritation was especially painful in the inguinal regions,²⁴.

Urinary Organs.—[40.] The urethra was cauterized with stick nitrate of silver, this set up an acute cystitis, utterly uncontrollable by remedies (after six years),²⁴.—Incessant enuresis (after six years),²⁴.—Remittent dysuria, with backache, formed prominent features in the history of the case,²⁴.—Urine sometimes thick and hot, always too frequent (after five years),²⁴.—The microscope revealed copious blood-disks in the urine, but nothing further; repeated examinations of the urine, obtained under very varying conditions, always disclosed the presence of hæmaturia, but no casts of any kind were ever detected (after five years),²⁴.

Sexual Organs.—The irritation passed to the pudendum, giving rise to ulceration,²⁴.—An irritable ulcer surrounded the *os tiner* (after five years),²⁴.—Pain in the left ovarian region (after five years),²⁴.—Catamenia preceded by mental depression, pain, pressure, and constipation; the flow is sometimes brown (after five years),²⁴.—Catamenia intermittent, average in amount; always accompanied by pain and flatulence,²⁴.

Respiratory Organs.—[50.] Voice hoarse,⁷.—Hoarseness, entire loss of voice,¹⁶.—Huskiness (after four years),²⁴.—"Hacking cough on lying down" (after two years),²⁴.—Hurried respiration,¹⁷.—Respiration 34, but not particularly labored, and not strikingly laryngeal in character (after three hours),¹⁹.—Respiration and deglutition much impeded,⁷.—About half a minute after an application of diluted liquor ammonia to the tongue, he was seized with a spasm of the glottis, his face became pale, with drops of

perspiration on the forehead, and his arms were thrown to grasp for air (really to assist respiration by means of the pectoral muscles); he said, "I shall choke," and got out of bed and stood upright, but with no improvement, for he sank back on the bed again, his face became livid, he ceased to breathe and the pulse stopped. He breathed about four times after tracheotomy was performed, and died in about three hours and a half after the bite.¹⁹—Dyspnoea (in two hours),¹³.

Chest.—"Congestion at the apex of the right lung" (after four years),²⁴.—[60.] The apices of the lungs were doubtfully, but not decidedly dull (after five years),²⁴.

Heart and Pulse.—Palpitation (after five years),²⁴.—Beating of carotid arteries was violent; pulse 160 per minute,¹⁷.—With the gastro-enteric irritation, an extremely irritable and rapid action of the heart,²⁴.—Pulse 64 (after three hours),¹⁹.—Pulse small and quick (fourth day),⁹.—Feeble, quick pulse (in two hours),¹³.

Neck and Back.—The part (right side of neck) began to swell that night, and was red and burning; the swelling gradually increased to the size of an egg, and lasted three weeks,²⁰.—Aching of the part (right side of neck) all day; next burning, lasting all night; cold water relieved the burning for a time, but it afterwards returned worse than before,²⁰.—Woke last night with pain in left neck, preventing her from turning it to left side; felt least when lying on back, best on right side; lasted one hour and a half (fourth day),²¹.—[70.] Backache, with the remittent dysuria; she was in the habit of deadening the backache by immersion in ice-cold water,²⁴.

Superior Extremities.—Pain in shoulder in the region of the wasp stings; glands in right axilla swollen (fifth day),⁹.—During the whole progress of the case there was much pain and soreness on the shoulder-blade where the stings were received, and it subsided only with the other symptoms,⁹.—Pain in left shoulder-joint on moving it, as if sprained; worse on lifting the whole arm and on twisting it (after two hours and a half),²³.—Aching of hand and arm up to shoulder, lasting all day,^{20a}.—Burning of the part (right thumb), then swelling, red, with burning pain,^{20a}.

Inferior Extremities.—Rheumatic pain in left instep, lasting a week,²⁵.

Generalities.—Alopecia (after five years),²⁴.—Slight *oedema pedum* (after five years),²⁴.—Quaked and trembled, and my teeth chattered as if I had a paroxysm of ague,¹⁵.—[80.] In less than an hour his hand became greatly swollen and painful, which was followed immediately by swelling and puffiness of the lower lids and scrotum, together with integuments of the penis; the parts were swollen more than twice their usual size; almost immediately the skin on the abdomen, arms, legs, neck, and nearly all the back turned purple (almost black), which was followed by an eruption of urticaria which completely covered the body; two or three hours after the sting, his eyes were nearly closed, and this dark color and urticaria were fully developed; they all continued about twenty-four hours, when they gradually disappeared in the order in which they came on,¹².—Within ten minutes his thumb became considerably swollen, and the whole of his face, especially the eyelids, became swollen and puffy; very shortly the face, and more particularly the ears became very red, as if covered with a scarlet rash; the child was very restless during the night; he complained much of a sensation of heat, and much irritation; wherever he scratched

himself there arose little spots, like the blains of nettlerash. There was some swelling and redness of the left hand and arm; but the most marked symptom was the swelling and redness of the face, which reminded him of erysipelas. After forty hours there was considerable oedema of the eyelids, especially of the lower, and the face was pallid and puffy,¹⁴.—Swelling of the mouth and throat, with violent burning pains, nausea, and vertigo, so that the patient was obliged to go to bed. After two hours she was found in a violent fever, unconscious and delirious, the face, neck, and arms swollen and shining red. Respiration very much impeded, and swallowing very difficult. Pulse 126; heart's action irregular and tumultuous. Cured by Camphor,¹⁰.—It seemed as though a cutting instrument were piercing all the joints; he likened the sensation to electric shocks; the arm, face, and head became swollen; the eyes became red and twitched; red lines extended along the absorbents; itching over the whole body, complete insensibility, after ten minutes; vomiting; pulse slow; heart's action scarcely perceptible.².—A violent heat came over me, and I felt sick; then I turned giddy and spun round and round like a top, till I fell headlong into a currant bush; however, I managed to get up and staggered like a drunken man to the house, and got into a chair, but in a moment fell out of it on my knees, all but fainting; they dashed water in my face, and at length I was able to lie down on my bed,¹⁵.—Body and extremities presented very nearly the same appearance as the face, though less bloating was present,¹⁷.—Marked nervo-muscular excitement,¹⁷.—Feeble (second day),¹⁵.—I felt once or twice as if I were actually dying (first night),¹⁵.—General languor (after five years),²⁴.—[90.] Great prostration for several days.².—Faint feeling and trembling all day, with nausea (second, third, and fourth days),²¹.—Faintness,⁴ ¹³.—Great faintness at the time was succeeded later by marked and increasing languor,²⁴.—Universal distress,⁸.

Skin.—The skin surrounding the sting immediately began to swell, erythema (alternating with large weals) spread over the whole surface of the body, into the mouth and down through the gullet to the stomach, causing vomiting which brought some temporary relief; the irritation was especially painful in the inguinal regions, thence it passed to the pudendum, giving rise to ulceration,²⁴.—Erythematous blush on left half of body from head downward, lasted eight to ten days and desquamated; then rheumatic pain in left instep, lasting a week,²⁵.—The sting was followed by a burning sensation, as if something were sticking and drawing out; the part stung was bright red, elevated, with a hard swelling, the redness surrounded by a circle of cold chilly sensation, soon changing to a general chill, repeated at short intervals that seemed to extend in waves all over the whole body,³.—Hands, feet, and chest becoming as red as if I had scarlet fever,¹⁵.—The cheek was also much swollen, and the skin soon became of a bright red tint. The redness spread rapidly in all directions over the head and down the neck, shoulders, back, and front of chest; wherever it travelled it was accompanied with pain and tenderness (after twenty minutes),¹³.—[100.] Subsequent desquamation of the whole abdomen,⁴.—Prurigo-like, pinkish, lentil-shaped spots upon hand and forearm, on neck and all over down to the feet,¹⁶.—An ulcer, lasting three months after the sting,⁵.—Itched all over to a dreadful degree,¹⁵.—Intense itching of the part (right side of neck), every day about 3 or 4 A.M., lasting about half an hour, slightly relieved by vinegar applications (after third day); immediately after the itching, there was burning for half an hour (from scratching the part); this continued for three weeks; towards

the end of that time it would intermit for a day or two,²⁰.—Intense itching of the part (right thumb); it came on about 3 or 4 P.M., about 8 or 9 A.M., and again about 3 P.M.; it lasted half an hour each time, and was immediately followed by burning for half an hour; the itching was relieved by applications of salt and vinegar; this lasted four days; for the next three days the itching only came on between 8 and 9 A.M., and was less severe and shorter,^{20a}.

Sleep.—No sleep all night,¹⁵.—Disturbed sleep (after five years),²⁴.—Very restless at night,¹⁴.

Fever.—Feet cold, except in summer, when they burn uncomfortably (after five years),²⁴.

VICHY.

The mineral springs at Vichy, in France.

Analysis of Grande-Grille springs, by Bouguet.

In 100 grams are found :

Carbonic acid,	4.418	Ferric oxide,	0.002
Sulphuric acid,	0.164	Calcium,	0.169
Phosphoric acid,	0.070	Strontium,	0.002
Arsenic acid,	0.001	Magnesium,	0.097
Hydrochloric acid,	0.334	Potassium,	0.182
Silicic acid,	0.070	Sodium,	2.488

Authority. Dr. Croserio, *Annales de la Medecine Homceopathique*, October, 1842, vol. ii, p. 109, took two hours before dinner (3 P.M.) a teaspoonful of pure Eau de Vichy (first day); same at 6 o'clock (second day), same at 6 A.M. and 5 P.M. (third day), in the morning (sixth, seventh, eighth, and ninth days), two spoonfuls in the morning (eighteenth, twentieth, twenty-first, twenty-second, twenty-third, and twenty-fourth days), four spoonfuls in the morning (twenty-fifth, twenty-ninth, thirtieth, and thirty-seventh days), six spoonfuls in the morning (thirty-eighth day), prepared 2d trit. before going to bed (forty-second day), took 1 grain of 2d trit. (forty-fifth day), 7 grains 3d trit. (fiftieth day), 9 grains of same (fifty-first day), 1 grain in the morning (fifty-third and fifty-sixth days), 3 grains (sixty-second day), 2 grains (sixty-fourth, sixty-sixth, sixty-eighth, sixty-ninth, seventy-second, seventy-third, seventy-fourth, twice seventy-ninth days), 2 grains of 3d trit., at 6 A.M., and 2 drops 4th dil. (eighty-first day), 4 drops 3d dil. twice (eighty-second day), same (eighty-third day), same at 5.30 A.M., and 3 drops at 10 P.M. (eighty-fifth day), 3 drops (eighty-sixth day), same in the morning and at 8 and 10 P.M. (eighty-eighth day), same at 3, 6, and 6.30 A.M., and 6 drops at 3, 9, and 10 P.M. (eighty-ninth day); a dose at 2, 3, and 6 A.M., 5 drops of 5th at 10 P.M. (ninetieth day), mixed 5 drops of 5th in half a glass of water, to be taken in small swallows every half hour (ninety-first day), 5 drops 2d dil. at 5, 5.30, and 6.30 A.M. (ninety-second day), same at 6 and 6.30 A.M. (ninety-third day), same dose (ninety-eighth day).

Mind.—Very low-spirited, felt as though some misfortune were about to happen (eighty-third day).—Very low-spirited, causelessly anxious about the future (in the morning), (ninety-ninth day).

Head.—After the second swallow, slight compressive pain in the forehead and temples (ninety-first day).—Some minutes after, slight pain in the temples and forehead (ninetieth day).—Very painful stitching in the

right temple for some minutes (after nine hours and a half, fiftieth day).—A stitching behind the right mastoid process, followed by griping in the middle abdomen; then a return of the same stitching during some minutes (after six hours, seventy-second day).—Stitches in the petrous portion of the temporal bone (after one hour, eighty-third day).—Pain in the head; pressure at the occiput, with general uneasiness, as if fever were coming on (after dinner); the pain left on wrapping the head up warmly (twenty-sixth day).—In the evening, stitches in the occiput below the left tuberosity (thirty-first day).—[10.] Violent itching of the head, in the morning, on rising (twenty-fourth day).—Violent itching in the head (after one hour, sixty-eighth day).—Itching in the forehead (eightieth day).

Eye.—Stinging in the eyes, with lachrymation (fifty-second day).—Pain below the left eye, like pressure, after breakfast (ninety-ninth day). Different colored sparks before the eyes in the morning (ninety-ninth day).

Nose.—Coryza (ninety-second day).—In the morning, on rising, fetid, corpse-like odor in the nose (sixty-sixth day).—A very strong smell of cucumbers in the nose, in the morning (seventy-fifth day).

Face.—Sharp stitching between the articulation of the jaw and the left temple (after ten minutes, forty-fifth day).—[20.] Twisting pain in the lower jaw, near the coronoid process, as if the jaw was swollen, when masticating on that side, during the whole meal (after twelve hours, eighteenth day).

Mouth.—Mouth very dry, with very bitter taste, all day (ninetieth day). Abundant secretion of saliva, immediately.—Flow of salty water in the mouth, with slight burning in the stomach (heartburn). (after a quarter of an hour, second day).—Water in the mouth, instantly (third day).—Some saltish water rose in the mouth (seventh day).—Flow of water in the mouth, which lasted a part of the morning (after a minute, fiftieth day).—Flow of saliva in the mouth (fifty-third day).—Flow of water in the mouth; rumblings in the stomach (after a quarter of an hour, sixty-second day).—Water rises into the mouth, with nausea (eighty-third day).—[30.] Bitter and clammy taste in mouth, on rising (second day).—Bad taste in mouth, in the evening (second day).—Bitter taste during the day (thirty-third, thirty-fourth, and sixty-fourth days).—Bitter taste in mouth, in the evening (several days).—Bitter mouth in the evening, with thirst (twenty-ninth day).—Bitter mouth in the morning, on rising (seventh, ninth, and eighty-fifth days).—Bitter mouth in the morning (ninth day).

Stomach.—Hungry sensation in the stomach, immediately.—Little appetite, no thirst (ninth day).—Keen hunger before dinner; yet at the meal he eats very little, and without relish (twenty-sixth day).—[40.] Appetite and no thirst (thirty-third day).—Craving for food, as from feebleness of stomach, with sick feeling, without hunger (after one hour and a half, eighty-ninth day).—Appetite poor (ninetieth day).—During dinner, I drank less than usual (eighteenth day).—In spite of the hot weather, I have been much less thirsty than usual, since I commenced these provings (eleventh day).—Heartburn (after a few moments, twenty-first day).—Heartburn, with sickness at the stomach (after eleven, and seventeen hours, twenty-first day).—Transient nausea while eating, causing him to stop for awhile, after which he continued the meal without further interruption (after six hours, twenty-third day).—Passing sensation as if about to be sick at the stomach, as when first feeling the effects of an emetic, without retching or efforts to vomit (after half an hour, eighteenth day).—Acidity of the stomach (after five minutes).—[50.] Belching of air (after an hour).—

Weight at the epigastrium (fifty-third day).—Slight griping in the stomach, with emission of flatulence, immediately (twenty first day).—Griping in the stomach, with some flatulence, immediately (twenty-third day).—Griping in the stomach, with ineffectual urgings to stool (eighty-ninth day).—The pain in the stomach continues all the morning, like a griping, until breakfast (eighty-third day).—Slight pinching at the upper part of the stomach (eighty-third day).—Pinchings in the epigastrium (eighty-third day).—*After the first swallow*, cutting pain throughout the whole stomach (ninety-first day).—Burning at the stomach, in the evening (seventh day).—[60.] In the evening, slight burning at the epigastrium (second day).—Painful sensation at the stomach, like a burning (after half an hour, sixty-second day).—Burning in the stomach, which rises towards the throat, followed by singing in the ears, heaviness in the head, and dizziness (*after some minutes*, seventy-second day).—Burning in the stomach (after a quarter of an hour, seventy-ninth day).—Slight burning in the stomach (eighty-first day).—Slight burning in the stomach after taking it (eighty-ninth day).—Burning in the stomach, some minutes after each dose (eighty-ninth day).—Disagreeable feeling in the stomach (a kind of burning), like urging to stool; the burning in the stomach is more intense in the afternoon (ninetieth day).

Abdomen.—Shootings in the liver, at 6 P.M. (fifty-third day).—Compressive pain in the left hypochondrium (after half an hour, fifty-third day).—[70.] Slight colic in the umbilical region (after one hour, eighteenth day).—Emission of burning flatulence, with slight urging to stool (sixth day).—Copious emission of flatulence all at once (after two hours, seventh day).—Emission of flatulence (after one hour, sixty-eighth day).—*During the day*, borborygmus in the bowels, slight griping in the bowels (second day).—Borborygmi in the night (eighty-eighth day).—Some borborygmi (ninetieth day).—Rumbling in the abdomen, rising of air (fifty-third day).—Rumbling in the bowels, emission of flatulence, copious pulraceous stool (*after a quarter of an hour*, sixty-ninth day).—Inflation of the bowels; gripes in the middle of the abdomen, shifting to the lower part, which cease after an emission of burning flatulence (thirty-first day).—[80.] Inflation of the bowels, with griping, in the afternoon, and especially in the evening, with emission of flatulence (thirty-third day).—Awoke with distension and uneasiness in the bowels; bad taste, as if from indigestion, which ceased after rising (eighty-sixth day).—Griping in the abdomen, with ineffectual urging to stool; stitching pain in the rectum, in the morning, after rising (thirty-fourth day).—Griping in the bowels, at long intervals (thirty-fourth day).—Slight griping in the bowels (thirty-fifth day).—Griping in the bowels (after ten minutes, forty-fifth day).—A little griping in the bowels (forty-sixth, fiftieth, and eighty-ninth days).—Griping in the bowels, as if a stool was desired, without real need (eighty-ninth day).—Pressing gripes in the bowels (ninety-second day).—Burning borborygmi (ninety-first day).—[90.] Pinching in the bowels (after an hour, second day).—Immediately slight colic, which passed off with flatulence (eighty-third day).—Griping stitches in the abdomen, which cease after a soft stool, in the morning; colic in the middle of the bowels, at noon; gripes in the lower bowels, in the afternoon, more severe in the evening (thirty-second day).—Some gripings in the bowels on rising; after breakfasting on chocolate strongly flavored with cinnamon, they ceased very gradually in the course of the day (thirty-third day).—A little pain in bowels (after half an hour, seventy-ninth day).—Slight pain in the bowels, like urging to stool, which lasted some minutes (after a quarter of an hour).—Feeling in bowels like desire for stool; I passed nothing but

wind some minutes after (third day).—In the evening, sensation as if diarrhœa was coming on; then a feeling of hunger at an unusual hour (eighty-second day).

Rectum and Anus.—Ineffectual urging to stool, nothing but wind passed (second day).—Urging to stool, with stitching in the rectum, which went off on the emission of flatulence (after a few minutes, thirty-eighth day).—Ineffectual urging to stool, at 8.30 A.M. (eighty-third day).—[100.] Urging to stool, which goes off with flatulence (ninety-third day). •

Stool.—Very difficult stool, with copious emission of flatulence (second day); no stool yesterday; to-day a very difficult one (fifth day); very difficult evacuation in the evening (sixth day); a very difficult stool, followed by burning and uneasiness in the rectum (eighth day); a good evacuation in the morning (ninth day); no stool (tenth day); stool regular (eleventh day); slow stool (eighteenth day); no stool either to day or yesterday (twenty-second day); copious evacuation in the forenoon (twenty-third day); large soft stool in the morning (twenty-fourth day); no movement of the bowels yesterday; this morning, soft stool (twenty-seventh day); no stool (thirty-fourth day); regular and normal evacuation in the morning (thirty-fifth day); constipation for three days (forty-sixth day); no movement of bowels to-day (fiftieth day); copious diarrhœic stool in the morning (sixty-seventh day); no stool during the day (eighty-second day); copious natural stool, at 8 A.M. (eighty-third day); soft stool in the evening (eighty-third day); two soft stools during the day (eighty-fourth day); two soft stools in the forenoon, with pain in stomach (eighty-ninth day); constipation (ninety-third day).

Urinary Organs.—Griping in the bladder, in the morning (twenty-seventh day).—Frequent urination (seven times), during the night; urine abundant, watery, and foaming (fifth day).—Copious emission of watery urine (twenty-fourth day).—Copious watery urine in the night (thirty-seventh day).—Very copious urination, during the night and this morning (thirty-first day).—Copious urination (seventy-third day).—In the night a copious urination (eighty-eighth day).—Urine copious, abundant, and watery (eighty-ninth day).

Sexual Organs.—Strong and long-lasting erections, without incitement or venereal desire, in the afternoon (fiftieth day).—[110.] Excessive itching at the orifice of the glans penis and at the fossa navicularis (fifty-first day).—Sharp itching of the scrotum, which lasts two days (seventy-fifth day).—Diminution of venereal desire (twenty-second day).

Respiratory Organs.—During last night an attack of dry cough, with tickling in the neck. On continuing the trituration, this morning, violent and frequent sneezing, followed by fluent coryza (forty-second day).—Dry cough produced by a pricking in the neck (after six hours, fiftieth day).—Cough at night, with difficult expectoration (fifty-first night).—This morning cough, with mucous expectoration, without pain or any sensation exciting the cough, beyond the necessity of clearing the air-passages (fifty-second day). •

Chest.—Painful uneasiness in the chest, followed by expectoration of purulent matter; this uneasiness ceases gradually (ninety-second day).—Sensation on the chest as if a bar pressed across it prevented respiration (a quarter of an hour after taking the medicine), followed by a cough, with expectoration of thick mucus (ninety-third day).—Tearing pain at the borders of the false ribs on both sides (eighty-third day).—Stitch in right side of chest, in evening (twenty-ninth day).

Neck and Back.—[120.] Painful stiffness of the muscles of the back of the neck and of the scaleni of left side, as after making a false step; moving these parts is very painful (in the afternoon), (twenty-seventh day).—Less stiffness of the neck, and it ceased entirely in the evening (twenty-eighth day).—After a sound sleep he felt, on rising, something remaining of the pain in neck, but it ceased entirely in the course of the day (twenty-ninth day).—Stitch in the right lumbar region when seated, preceded by stitch in heart (in the evening); these two pains are of short duration (ninetieth day).

Extremities.—Bruising pain in the fingers, and uneasiness as if a fever were coming on, after lunch (thirty-first day).—Stitch in the right tibia, extending from the upper part to the instep (eighty-ninth day).

Generalities.—Uneasiness as if a fever was coming on; weakness, desire for food, and longing for wine; yet he relished his dinner, and felt well after it (twenty-eighth day).—General uneasiness, as before a fever, nausea; very painful stitches in the right side of the chest, corresponding to the commencement of the cartilaginous portion of the two first false ribs, and extending below and behind the breast towards the back; clammy bitter taste, without appetite or thirst; anxious feeling, as if some misfortune were about to happen; this uneasiness goes off on taking dinner (eighty-ninth day).—Excessive weakness after coition, as if suffering from hunger (twenty-second day).—Very sensitive to cold and to draughts of air (twenty-eighth day).—[130.] 4 P.M., bruised pain in the arms; headache, as if the temples were compressed; pain in bowels, as if diarrhoea was coming on, with sore pain in the stomach (the weather was stormy), (thirty-first day).

Skin.—A red and sore pimple on upper lip (third day).—A few small pimples on the back of the neck, with very lively pricking (twenty-fourth day).—Itching of the face and right eyebrow (fifth day).—Between the eyebrows sharp, prickly itching, which burned after scratching (eighty-second day).—Pricking itching behind the neck, as of pins, compelling to scratch (second day).—Pricking and itching in the back, which ceases on scratching, but returns afterwards (second day).

Sleep.—Somnolence after dinner (sixty-eighth day).—Excessive sleepiness in the evening (eighty-fourth day).—Fatiguing dreams at night, but the sleep is more prolonged than usual (ninetieth day).

VINCA.

Vinca minor, Linn.

Natural order, Apocynaceæ.

Common names, Periwinkle; (G.), Sinngruen; (F.), Pervenche.

Preparation, Tincture of whole plant.

Authority.—Rosenburg, A. H. Z., 17, 41, four healthy persons took doses of 20 to 60 drops of the tincture.

Mind.—Sadness, with fear of death.—Lachrymose.—Peevish and quarrelsome, soon followed by repentance.

Head.—Whirling vertigo, with flickering before the eyes.—Headache.—Pressure upon the head externally.—Dulness of the sinuiput, with slow pressure towards the eyes and dimness of the eyes, aggravated by stooping when writing.—Pressure in the temples.—Sticking in the left temple, extending towards the malar bone.—[10.] Tearing pain in the vertex, with a feeling as if a hammer were beating from within outward.—Matting of

the hair of the head.—Moist eruption on the scalp, with many vermin, especially itching at night, with burning after scratching.—Corrosive itching on the scalp, with irresistible desire to scratch.—Itching biting on the scalp, especially on the vertex, frequently provoking scratching.

Eye.—Itching and burning of the lids, which become red.—On getting snuff into the eye there was so little secretion that he was obliged to wash it out with water.—Obscuration of vision while reading.—Fog before the eyes while reading, at times also while walking.

Ear.—Ringing and whistling in the ears, with a feeling of cold wind, especially in the left ear.

Nose.—[20.] The tip of the nose becomes red from the slightest cause.—Frequent nosebleed.—Stoppage of the nose, mostly of one nostril, with discharge of much mucus through the posterior nares.—Distressing dryness and heat in the nose, extending into the frontal sinuses.—Itching in the nose.

Face.—Swelling of the face, with papular eruption.—Paleness of the face.—Tearing in the malar bones.—Swelling of the upper lip and corner of the mouth.—Lips dry.

Mouth.—[30.] Toothache.—Tearing in the teeth relieved by the warmth of the bed.—Aphthæ in the mouth.—Increased secretion of saliva.—Inspid taste in the mouth.—Inspid taste to all food.

Throat.—Frequent hawking through the day.—Ulcers in the throat (?).—Sore throat, with difficulty in swallowing.—Sensation as if something were sticking low down in the œsophagus, which provokes swallowing.

Stomach.—[40.] Hunger alternating with loss of appetite before the hunger has been satisfied.—Scarcely any thirst.—Empty eructations after drinking beer, and generally aggravated from taking liquid.—Violent empty eructations.—Nausea, after coffee.—Violent, bitter, copious vomiting of yellowish-green liquid.—Gastric disturbances.—Emptiness of the stomach.

Abdomen.—Distension of the abdomen after a stool.—[50.] Abdomen full, tense but painless.—Flatulence.—Rumbling and gurgling in the abdomen, with emission of much offensive flatus.—Gripping in the abdomen.

Rectum and Anus.—Urging to stool.

Stool.—Stool first hard, then soft.—Stool exhausting, with burning in the anus.

Urinary Organs.—Diminished secretion of urine.—Urine pale yellow.

Sexual Organs.—Excessive menstruation, with great weakness.

Respiratory Organs.—[60.] Tenacious mucus in the trachea.—Hoarseness.—Spasmodic cough, with little tickling in the larynx.—Rapid respiration.

Chest.—Pains in the chest, with sticking and dyspnoea.—Pressure on the sternum, with feeling of emptiness in the chest.—Stitches on the sternum.

Neck.—Painful tension and stiffness of the cervical muscles, with an illusive sensation as if a weight were lying upon it.

Extremities.—Inclination to stretch the limbs.—Tearing pains in the limbs.

Superior Extremities.—[70.] Cramp drawing in the upper arm and tips of the fingers.—Swelling and stiffness of the first joints of the fingers, with burning pain in the nails.

Inferior Extremities.—Cramplike drawing in the feet and toes.

Generalities.—Weakness as if he would die.—Great weakness and prostration.—Tremulous feeling in all the vessels.—Tremulous feeling, especially in the upper extremities, with tendency to start, especially on exerting the mind.—Feeling of emptiness in various parts of the body.—Arthritic tearing in the bones.—Most of the symptoms relieved by moving in the open air.

Skin.—[80.] Moist eruption on the septum of the nose; discharging a moisture, which drying, formed a light-brown scab; the skin was dirty white, elevated, with a red areola.—Great sensitiveness of the skin, with redness and soreness, even from slight rubbing.—Burning in the ulcers like bedsores on the left nates.—Corrosive itching, provoking scratching.—Itching of the upper lip, which provokes scratching.—Itching moist spots on the upper part of the right ankle.

Sleep.—Frequent yawning.—Sleeplessness and restlessness at night.—Lascivious dreams.

Fever.—Sudden paroxysms of shivering.—[90.] Heat, with full hard pulse.—Great sensation of warmth in the scalp, with prickling.—Heat of the cheeks, without redness.

Conditions.—**Aggravation.**—(*Liquids*), Empty eructations.—(*Stooling*), Dulness of sinapit.

Amelioration.—(*Warmth of bed*), Tearing in teeth.—(*Motion in open air*), Most symptoms.

VIOLA ODORATA.

Viola odorata, Linn.

Natural order, Violaceæ.

Common name, Violet.

Preparation, Tincture of plant in flower.

Authority. (Gross, Archiv. für Hom., 8. Part 2, p. 182.) 1, Hahnemann; 2, Gross; 3, Stapf.

Mind.—Morbid fantasies; fantasies come to him, he makes an effort to grasp them, but before he can do so they disappear (after eight hours),³.—Sadness changing to gloomy despondency,³.—Aversion to talking, gloomy and hypochondriac mood, with weakness of memory (after one hour and a half),³.—Aversion to all music, especially the violin,³.—Special sharpness of mind, lasting a long time,³.—Increased activity of mind for half an hour (after one hour); followed by difficult reflection for an hour (after one hour and a half),³.—Very great intellectual and emotional activity, with constant weak memory, followed by headache (after nine hours),³.—Confusion of thought; when he attempted to express his thoughts by words they immediately disappeared, and some strange thoughts took their place, and he could not recall the former,².—Disconnected thoughts thronged one upon the other, none of which he was able to grasp; but his judgment remained good, because he knew how little he would be understood if he expressed his thoughts; on this account he kept quiet, yet for the most part was unable to express any of his fantasies even by a word,³.—[10.] He seems able to recognize only half an idea; he puts it in the proper place but cannot hold to it; he makes great effort to grasp the other half, but at the same moment half of another incomplete idea presses upon him, and so on; thoughts chase one another, but he always has only half a thought which he cannot hold to and cannot think out; his judgment, however,

remains, he recognizes morbid fantasies, but cannot help them; therewith he looks like one meditating and despondent,³.—Momentary vanishing of thought,².—Weakness of memory; when he reaches a period in reading he has already forgotten what the beginning of the sentence was,².—Great weakness of memory for twenty-four hours,³.

Head.—*Vertigo*; everything in the head seems to whirl around, even while sitting,².—*Heaviness of the whole head*, the cervical muscles seem very weak,².—Dull confused headache,³.—Dull headache, with cramp in one eye, with vision of a fiery tremulous half circle,³.—Drawing in the left frontal eminence (after a quarter of an hour),².—*A prickling in the forehead from rush of blood* (after eleven minutes),².—[20.] Tension in the occiput and forehead (after three-quarters of an hour),².—Tension of the scalp of the occiput, even when not moving, though worse on bending the head forward and backward; a painful sensation which compels him to wrinkle the frontal muscles, lasting several days,³.

Eye.—Burning pain in the left eye,³.—Heat and burning in the eyes,³.—Tension beneath the eyes,³.—**Lids.** The eyes close,¹.—Cramplike spasms in the eyelids, extending to the malar region, especially of the left side,².—Heaviness of the lids with the usual clearness of the eyes, as sometimes when one has risen very early in the morning (after one hour and a quarter),³.—Tendency of the lids to close without physical sleepiness,².—

Ball. It seems to him as though each of the eyeballs were compressed from both sides (after one hour and a half),².—**Pupil.** [30.] Pupils contracted (after one hour),³.—**Vision.** It seems thick before the eyes, and everything seems dim,¹.—Sharp vision, ease in looking (after nine hours),³.—He is obliged to hold objects somewhat nearer than usual in order to see distinctly (after two hours),³.—The contours of letters are not sharply defined while reading, they seem to run together,³.—Illusion of vision; at the point to which he looks he seems to see a half point, which then becomes a tremulous light, constantly more fiery, and at last looks like a half circle and a zigzag fiery appearance following a serpentine course, which at last becomes weaker, and gradually disappears; with this the white of the eye looks red (after eight hours and a half),³.

Ear.—Drawing and tension in the left ear rather externally,².—Pressing pain behind the left ear externally,³.—Deep transient stitches alternately beneath one or the other ear, especially the left,².—Sticking from within outward, in the left ear,³.—[40.] Rushing and ringing in the ears,³.

Nose.—Numb feeling in the tip of the nose, as if it had been beaten, and the blood were pressing out,³.

Face.—*Tension, which at times extends to the upper half of the face, especially of the nose, thence to the forehead and temples, as far as the ears, alternating with a similar sensation in the occiput and cervical muscles*,².—Pressure on the malar bone,².—Violent drawing pressure from the malar bone to the temples, immediately,³.—Tearing pain in the left lower jaw, extending up to the ear,³.

Mouth.—Tearing in the teeth of the right lower jaw (after ten minutes),².—A sensation in the hard palate, as if it were completely dried up,¹.

Stool.—Constipation for two days; he has inclination but nothing results,¹.

Sexual Organs.—Extremely unusual nocturnal emission, which does him no good; followed by headache,¹.

Respiratory Organs.—[50.] Short breath,³.—Respiration is scarcely noticed, inspiration and expiration are difficult; it is most painful

on expiration, with great apprehension, associated with violent beating of the heart (after eight hours and a half),³.

Chest.—Frightful oppression of the chest and dyspnoea, with pain in the chest as from a stone lying upon it,³.

Neck.—Jerking drawing in the cervical muscles, near the nape of the neck, extending downward, in the evening, while lying on the opposite side,¹.

Extremities.—*Trembling of the limbs*,².

Superior Extremities.—Drawing pain in the right elbow,³.—*Pressing pain in the right wrist*,³.—Drawing pain on the back of the left metacarpus, extending towards the wrist,³.—Cramplike pain in the first joint of the left index finger, even during rest (after five minutes),².—Sticking in the tip of the middle finger (after a quarter of an hour),³.

Generalities.—[60.] Relaxation of all the muscles,³.—Bruised pain in all the bones of the body, in the morning in bed, after waking, which disappears after rising,¹.—Transient burning, here and there, on the body; it seems like a drawing-together in a small spot, and burning like a small transient flame, while sitting during the day, as well as while lying at night,¹.—Symptoms recurred equally in all positions, were mild yet more definitely felt than from other drugs,².

Sleep.—Yawning and stretching, without sleepiness,³.—Yawning every morning, so that the eyes fill with water,¹.—*Sleepiness in the eyes and lids, they will close*,².—He lies on the back at night during sleep with the left hand above the head, contrary to habit, and with the knees bent and lying far to the side,¹.

Fever.—Forehead hot,³.—Febrile shivering,³.—[70.] Nightsweat,¹.

Conditions.—**Aggravation.**—(*Moving head backward and forward*), Tension in scalp of occiput.

VIOLA TRICOLOR.

Viola tricolor, Linn. (Jacea.)

Natural order, Violaceae.

Common names, Pansy, Heartsease.

Authorities. (Gross, *Archiv für Hom.*, vol. vii, Part 2, p. 173.) 1, Hahnemann; 2, Franz; 3, Gutmann; 4, Langhammer; 5, Wislicenus; 6, Haase, *Dissert. de Viola tri.*, Erlangen, 1782; 7, Hufeland's *Journ.*, vol. ii, Part 4, pp. 128, 129, 137; 8, Schlegel, *Material.*, 1803; 9, Althof in Murray, *App. Mat. Med.*, p. 703.†

Mind.—Special joyous mood; he was less ill-humored, and could not be easily discomposed (curative action),⁴.—Sad about his domestic relations,³.—Morose mood all day, great sensitiveness and little desire to talk,⁴.—Introspective, discouraged, discontented with his own work (after twenty-six hours),³.—Introspective, discontented with himself, distrustful of himself, especially of his future (after ten hours),³.—Ill-humored all day, in the evening jolly and inclined to talk,⁴.—Ill-humored, quiet, indifferent (after fifty hours),³.—Ill-humored all day, very much inclined to quarrel, and being out of humor with himself,⁴.—Hasty in all his actions, as if impelled by an internal anxiety, yet with a feeling of great weakness and prostration,².—[10.] Fretful and weeping mood,¹.—Disobedience,¹.—Disin-

† Not found; reference seems to be wrong.—T. F. A.

clination for mental work (after fifty-two hours),³.—Not inclined to work, at least to earnest work,³.—Dulness of mind and disinclination to talk, which was almost impossible, in the afternoon and evening,³.

Head.—Confusion of the whole head and dulness (after thirty-one hours),³.—Dizzy and reeling, when walking,³.—Heaviness of the head with pressure towards the forehead,³.—Heaviness in the head as if a weight were lying upon it and pressing it forward; on stooping the head felt easier, on rising up it was more severe (after twelve hours),³.—Heaviness of the head with pressure towards the forehead,³.—[20.] Dull pain in the head and pressure in the forehead (after two hours),³.—Headache extending from the root of the nose into the brain, disappearing in the open air,¹.—Pressing and tearing headache, with heat of the face, and thirst,².—Pressing headache over the whole brain equally,³.—*Pressing pain in the brain, extending outward through the forehead*,³.—**Forehead.** Pressure in the forehead and dulness in the whole head; while walking the whole brain shakes, with heaviness, as if a stone were lying upon it, which extended forward into the head (after eleven hours),³.—Pressing headache above the right eye, disappearing on pressing upon it,².—Pressure in the frontal bones with dulness of the whole head (after two hours and a quarter),³.—Wavelike pressure in the forehead,³.—Tensive drawing externally in the left side of the forehead, extending down into the left cervical muscles (after one hour and a half),³.—[30.] Tingling in the forehead, while sitting still,².—Burning stitch in the forehead, as if externally in the bone,³.—**Temple.** Pressure outward at both temples (after three-quarters of an hour),³.—Pressing pain in the temple near the left eye (after eight hours and a half),³.—*Dull tearing stitch externally in the left temple* (after fifty-two hours),³.—**Vertex and Parietals.** Burning pressing pain on the right side of the vertex, while sitting,².—Pain as if bruised, on the side of the parietal bone, only when touched (after twenty-four hours),⁵.—Pressure outward at the right side of the head,³.—**Occiput.** Tensive sticking in the muscles of the right side of the occiput during rest, persistent on bending and turning the head,³.—Headache, sticking in the left side of the occiput, lasting day and night,¹.—**External Head.** [40.] Burning in the scalp above the forehead (after seven hours and a half),³.—Burning in the skin of the temple by the right eye (after thirty-eight hours),³.

Eye.—Biting sensation in the left eye as if perspiration were in it (after ten hours),³.—Itching-cutting stitches, from within outward, in the right eye (after four hours and a half),³.—**Lids.** Falling of the lids, with sleepiness, in the afternoon,³.—Hardened matter in the canthi (after three hours),⁴.—Pressing together of the eyelids, the eyes close and seem difficult to open (after eleven hours and a half),³.—Sensation of a hard body between the upper lids and the eyeballs, lasting three hours,³.—**Ball.** Tensive stitch in the left eyeball, persistent on motion (after thirty-six hours),³.—**Pupil.** Pupils contracted (after two hours and three-quarters),⁴.—**Vision.** [50.] Obscuration of the eyes, objects at a distance seem very much obscured,².

Ear.—Pressure from without inward upon the drum of the ear,³.—Itching needlelike stitches behind the left ear,³.

Nose.—Itching pressure towards the left side of the nose (after four hours),³.

Face.—Drawing tension in the left cheek in front of the ear (after three quarters of an hour),³.—Drawing-pressing pain extends from the left side of the lower jaw into the right side of the head (after half an hour),³.

Mouth.—Tongue white,³.—Tongue covered with mucus of a bitter taste; the food has a natural taste,³.—Much saliva, with sensation of dryness in the mouth,³.

Throat.—Sore throat, in the evening,¹.—[60.] Swelling of the cervical glands,⁷.

Stomach.—He has no appetite, and there is no taste to food,³.—Empty eructations (after half an hour),⁴.—Nausea and retching,⁶.—Pressing sticking in the diaphragm, persistent during inspiration and expiration (after ten hours),³.—Constrictive pain in the pit of the stomach on inspiration (after ten hours),³.

Abdomen.—Sticking cutting in the left hypochondriac region on inspiration, while sitting bent over (after fifteen hours),⁵.—Stitches externally about the umbilicus (after three hours),³.—Stitches as quick as lightning, in the whole right side of the abdomen and chest while walking,³.—Emission of flatus, with rumbling in the intestines (after two hours),³.—[70.] Gripping pain in the whole abdomen (after one hour and a quarter),³.—Gripping sticking in the intestines so that he was obliged to stand still, while walking (after seven hours),³.—Cutting in the abdomen without stool (after two hours and a half),⁴.—Cutting through the abdomen and urging to stool,².—Cutting in the abdomen, with howling and screaming; after which she fell asleep, at noon; on waking the pain immediately recommenced, followed by emission of much flatus and stool with mucus in large pieces,¹.—Pain like needle-stitches, in the upper abdomen, during inspiration and expiration,³.—Single jerklike stitches in the forepart of the lower abdomen while sitting, disappearing on standing up, and leaving behind a burning sensation,².—Pinching crawling in the whole right side of the pelvis, while sitting (after twenty-six hours),³.—Fine stitches in the left groin, while sitting, which continued somewhat even on rising up (after thirteen hours),³.

Rectum and Anus.—Excessive urging to a stool which is normal,².

Stool.—[80.] Soft stool, preceded by flatulence,³.—Hard stool (after thirteen hours),³.—Soft stool (after twenty-four hours),³.—Stool as if chopped,¹.

Urinary Organs.—Tenesmus of the bladder; he strained as if there were constantly more urine to pass,¹.—Dull stitch in the urethra, when not urinating (after eighteen hours),³.—Very frequent urging to urinate,³.—Frequent urging to urinate with emission of much urine (after three hours, and twelve hours),⁴.—Frequent desire to urinate, with remarkably little urine (after the third morning dose),⁴.—Frequent profuse micturition, much more than has been drunk, can scarcely hold it,¹.—[90.] Increased quantity of urine, which causes burning,³.—Scanty micturition (after twenty-four to thirty-six hours),⁴.—Urine very turbid,¹.—The urine smells like cats' urine,⁷,⁹.—Very offensive urine,⁶.

Sexual Organs.—**Male.** Erection in the morning,³.—Swelling of the prepuce,¹.—Pressing pain in the penis, extending to the glans (after two hours and a half),³.—Jerking in the penis, which tends to make it stiff, in the morning on waking,¹.—Burning in the glans penis, immediately,³.—[100.] Fine stitch in the back of the penis (after thirty-three hours),³.—Itching biting in the external skin of the penis (after sixty hours),³.—While standing, a voluptuous itching on the prepuce, accompanied by an erection, which provoked scratching (after three hours and a half),⁴.—Itching sticking in the scrotum (after five hours),³.—Emission with lascivious dream,³.—**Female.** Stitch in the region of the mons veneris, on the right side (after seven hours),³.—Leucorrhœa,³.

Chest.—Cutting pressure on the right side of the chest, not aggravated by inspiration, but by moving the trunk and arm; painful, as if bruised, on pressure (after twenty-four hours),⁵.—Twitching of the right pectoral muscles (after twenty-four hours),³.—Stitches in the chest, while standing (after three-quarters of an hour),³.—[110.] Constant dull stitch in the upper part of the sternum, aggravated by expiration (after fifty hours),³.—Oppressive sticking in the right side, while walking (after nine hours),³.—Dull stitches in the right side of the chest, more violent during inspiration than expiration (after seventy-four hours),³.—Itching sticking in the right pectoral muscles (after thirty-five hours),³.—*Stitch in the left chest, persistent during inspiration and expiration*, while walking (after six hours and a half),³.—*Stitch in the left side of the chest, on the true ribs* (after eleven hours and a half),³.

Heart and Pulse.—Anxiety of the heart, while lying, in wavelike beating, throbbing,².—Oppression and stitches in the region of the heart on bending the chest forward, while sitting,².—Pulse increased from ten to fifteen beats a minute,⁵.

Neck and Back.—Cramplike drawing in the cervical muscles, which suddenly drew the head backward (after two hours and a quarter),³.—[120.] Dull stitch in the left scapula (after twenty-six hours),³.—Pinching contraction between the scapulae, with a sensation of coldness (after ten hours),⁵.

Superior Extremities.—Cutting stitches, with itching in the axilla (after half an hour),³.—Fine stitches in the left shoulder-joint, disappearing on motion,³.—Dull stitch in the right axilla (after twenty-four hours),².—Fine stitches in the left elbow, persistent during rest and motion,³.—Some contractive needlelike stitches in the muscles of the left forearm near the bend of the elbow, while walking (after twelve hours),⁴.—Pressing stitches in the left ring finger only during rest, on movement it ceases, but returns during rest,³.

Inferior Extremities.—Stitches in the left gluteal muscles, while lying down (after thirty-seven hours),³.—The thighs feel bruised, in the morning on waking,².—[130.] Drawing in the right thigh, while standing (after one hour and three-quarters),².—Tearing bubbling in the internal and upper part of the thigh, while sitting (after two hours),².—Dull itching stitch in the left knee, not obliging scratching,³.—Itching stitch in the right patella, while lying, disappearing on motion and returning on sitting (after twenty-seven hours),³.—Pressing-out pain at the right tibia, persistent while walking and sitting, more violent while standing (after one hour),³.—Feeling of muscular twitches in the left calf (after two hours),³.—Twitching in the right calf towards the inner side (after thirty-hours),³.—Drawing along the calf and thigh, with giving way in the knees, while walking,².—Fine stitches in the right tibia, while walking (after thirty-six hours),³.—Tensive sticking in the middle of the right foot, while walking (after four hours and a half),³.—[140.] Tearing in the heel beneath the inner malleolus during rest, which disappears on moving the foot, and leaves a slight burning sensation,².—Pressing pain in the sole of the right foot, especially in the joints, while walking,³.—Pressing pain in the sole of the right foot (after two hours and a half),³.—Pressure in the sole of the right foot, while sitting (after four hours and a half),³.—Pressing burning in the left great toe, while sitting (after thirty-two hours),³.

Generalities.—Exhaustion of the whole body,³.—Frequently feels

as though he had not slept enough, while sitting, in the forenoon (after three hours and a half),⁴.

Skin.—Objective. Skin of the face thick, hard,⁷.—Nettlerash over the whole body, with stinging-biting sensation, not provoking scratching,¹.—*Eruption with intolerable (burning) itching, especially at night, over the whole face, and also behind the ears (only excepting the eyelids); *a hard thick scab formed, cracked here and there, from which a tenacious yellow pus exuded, and hardened into a substance like gum*,⁷.—[150.] Some hives on the left cheek, with violent itching, which obliges vigorous scratching, but which immediately returns after scratching (after ten hours and a half),³.—A pimple beneath the left zygoma, without sensation by itself, painful when touched (after ten hours),⁵.—Itching pimple on the last joint of the index finger (after twenty-four hours),⁴.—**Subjective.** *Cramplike pain in the skin between the scapulae, with cutting and crawling in the skin* (after eighteen hours),⁵.—Sticking itching in the left eyebrow, relieved by rubbing (after two hours),³.—Burning stitch in the skin of the upper abdomen, while walking (after thirty-two hours),³.—Burning sticking in the skin of the left thigh (after twenty-two hours),³.—Itching on the right wing of the nose provoking scratching.³.—Itching on the right scapula.³.—Itching of the dorsal muscles, relieved by scratching (after half an hour),³.—[160.] Itching between the scrotum and thigh, while sitting, relieved by scratching (after twenty-six hours),³.—Itching on the inner upper portion of the right thigh.³.—Itching anteriorly above the left knee.³.—Itching stitch in the skin of the right side of the abdomen, disappearing on touch (after nine hours),³.—Itching on the left inner malleolus (after twelve hours),³.—Itching sticking in the right foot below the external malleolus, not relieved by motion,³.—Itching in the ball of the right great toe, while standing, more violent while sitting.³.

Sleep.—Sleepiness. Sleepiness for two hours, in the afternoon.³.—Irresistible sleepiness, in the afternoon (after eleven hours and a half),⁴.—**Sleeplessness.** Falls asleep late on account of numerous thoughts; in the morning he wakes very early, lies upon the side to which he is totally unused, and cannot rouse himself completely on account of weariness.².—[170.] Restless sleep,³.—While asleep the child twitches the hands and closes in the thumb, with very dry heat over the whole body, and redness of the face,¹.—Frequent waking without cause,⁴.—*Frequent waking from sleep, as from wakefulness*,⁴.—**Dreams.** Vivid dreams,^{3 4}.—Amorous dreams,^{3 4}.

Fever.—Chilliness. He is chilly through and through in the cold open air, immediately,².—Chilliness, for a quarter of an hour, in the forenoon, cold creeping through the whole body, as from a cold wind, with dizziness of the head, vertigo, and a slight sensation of tense pulling asunder, in the middle of the brain (after one hour),².—**Heat.** Great heat over the whole body after eating a little, still greater heat in the face, with perspiration, oppression of the chest with great anxiety, which drove him about,².—Very transient sensation of heat, without thirst (after one hour),⁴.—[180.] Heat in the side of the face upon which he was not lying, in the evening in bed,⁵.—Sudden heat of the face without thirst, while sitting (after twelve hours),⁴.—**Sweat.** Nightsweat, two nights in succession,¹.

Conditions.—Aggravation.—(*Expiration*), Stitch in upper part of sternum.—(*Moving trunk and arm*), Pressure in right side of chest.—(*Sitting*), Stitches in abdomen; stitches in groin.—(*Standing*), Pain in left tibia.—(*Walking*), Vertigo; stitches through chest and abdomen.

Amelioration.—(*Open air*), Headache.—(*Motion*), Stitches in left shoulder-joint.—(*Standing*), Stitches in abdomen.

VIPERA.

• Including the following species and varieties :

Vipera Berus, Daudin (Pelias Berrus, Merrem ; *V. trilamina*, Millet ; Coluber Berus, Linn.) ; including three varieties, Cinerea, tartarea, rubiginosa.

Common names, Petite vipère or vipère peliade ; the common viper of the North, or Germany ; the adder of England.

Vipera Aspis, Merrem (including the *quondam* species *V. Chersæa*, Delalande ; *V. Blaniensis*, Leray. *V. Redii* ; *V. Delalandei* ; *V. Præster* and *V. ocellata*). This is the *Vipera Berus* of Delalande *non aliorum* ; *V. communis*, Millet.

Common names, Vipère commune, or Aspic ; the common viper of the South, or Italy, etc.

Authorities. 1, Dr. Merschner, Lond. Med. and Phys. Journ., 1826, p. 198, a boy æt. thirteen years, was bitten on third right finger ; 2, Revue Med., Oct., 1826 (Lancet, vol. xi, p. 284), a gardener was bitten on the hand ; 3, M. Piorry, Lancet, 1826, p. 560, a man æt. forty-six years, was bitten on the hand ; 4, Arch. Gen., from Rust's Mag. (Bost. Med. Intell., vol. v, 1827, p. 262), a shepherd was bitten on the tongue ; 5, Dr. Marianini, Repert. di Med. Torino, 1828 (Lancet, 1828-9 (1), p. 580), a woman, æt. twenty years, was bitten on the right ankle ; 6, M. Beaumont, Compte des Travaux Med. du Dep. de la Moselle (Lancet, 1830-1 (1), p. 384), a boy was bitten on the finger ; 7, Dr. Kaiser, Heidelberg Clin. Annals, 1832 (Frank's Mag. 3, 145), a boy was bitten ; 8, Heyfelder, Sanitäts, Ueber das Furst. Hohenzollern, 1833 (S. J. 8, 123), a man was bitten on the leg ; 9, Dr. Franchi, Antologia Med., Agosto, 1834 (S. J. 9, 57), a boy was bitten on the foot ; 10, Dr. Paulet, Bull. de Therap., 1835 (S. J. 9), a woman was bitten on the toe, during hot weather ; 11, Dr. Chas. P., Bibliothèque Hom. de Geneva, vol. v, 1835, a boy was bitten ; 12, Dr. Butazzi, Feliatre di Napoli (Med.-Chir. Rev., vol. xxvi, 1836, p. 509), a man, æt. forty-four years, was bitten between the forefinger and thumb of right hand ; 13, Geis, Med. Zeit. Preuss., 1836 (S. J. 15), a girl was bitten ; 14, Schumaker, *ibid.* ; 15, Dr. Koch, *ibid.*, effects of bite on the little toe ; 16, Dr. Lebrun, Zeit. für Geburstaude, 1837 (A. H. Z. 15, 110), effects of the bite ; 17, Casper's Woch. and Arch. de Med., Dec. 1839 (Lancet, 1839-40 (2), p. 111), a man was bitten on the tongue ; 18, John Moodie, M.D., Med. Phys. Journ., vol. xi, p. 481, Catharine Bishop, æt. seventy years, was bitten twice on the back of the hand ; 19, Gluckselig, Oest. Med. Jahrbuch, vol. xxiii (A. H. Z. 19, 335) ; 20, same, another case ; 21, Bull. de Therap., vol. vii (A. H. Z. 7, 259), a man was bitten ; 22, Harvey K. Owen, Lond. Med. Gaz., vol. xxvi, 1840, p. 337, John Burr, æt. twenty years, was bitten on the hand ; 23, Francis Adams, Lond. and Edinb. Monthl. Jour., vol. i, 1841, p. 796, a woman, æt. thirty-five years, was bitten by an adder on her leg ; 24, Herbert Mayo, Magendie's Journ. of Exper. Phys. (Lond. Med. Gaz., vol. xxix, 1841-2 (1), 487), a man, æt. twenty-six years, was bitten on his inner ankle ; 25, same, a robust woman, laboring under ague, was bitten on the ankle ; 26, Wm. Stockbridge, Bost. Med. and Surg. Journ., vol. xxix, 1843, p. 42, a lady æt. twenty-two years, was bitten by an adder ; 27, Pemberton, Lancet, 1849 (2), p. 638, a man, æt. fifty-one years,

was bitten on the thumb by an adder ; **28**, Dr. Weger, S. J. 23, 218, a man was bitten on the tongue ; **29**, George Lambert, *Lancet*, 1851 (2), p. 437, a man, æt. twenty-three years, was bitten on the right ring finger by an adder ; **30**, Dr. Nick, *Würt. Corr. Blat.*, 1854 (S. J. 71, 307), a pharmacist was bitten on the right index finger ; **31**, Pemberton, *Lancet*, 1851 (2), p. 157, a man, æt. thirty-one years, was bitten on the cheek by an adder ; **32**, Ipa-witz, *Oest. Med. Jahrbuch*, 1857 (S. J. 17, 29), a woman was bitten on the foot ; **33**, Dr. Jarjavay, *Gaz. des Hop. (Journ. de Chim. Med.)*, 1857, p. 604, a person was bitten on the hand by a *V. aspis* ; **34**, Philip Weston, *Lancet*, 1859 (1), p. 522, the author was bitten on the right forefinger by a viper ; **35**, Hussa, *Allg. Wien. Med. Zeit.*, 1861 (A. H. Z., M. B., 4, 50), a person, æt. fifty-two years, was bitten on the foot ; **36**, M. Soubeiran, *Sydenham Yearbook*, 1863, p. 437, a gentleman was bitten ; **37**, M. Demeuret, *Gaz. Hebd. de Méd. et Chir.*, Nov. 6, 1863 (*Ranking's Abstract*, vol. xxxviii, 1863, p. 195), a woman was bitten on the forearm, May 25, 1824 ; **38**, Dr. Heinzel, *Wien. Med. Woch.*, 1866 (S. J. 133, 192), symptoms from bite on himself, and from other observations ; **39**, Hering's Monograph "Schlangengift," 1837, *Vipera torva* ; **40**, same, *Vipera redi* (41 to 54, *Vipera aspis*, from Dr. Viaud Grand-Maraïs, *Gaz. des Hop.*, 1868, No. 62, and 1869, and *Études méd. sur les serpents de la Vendée et de la Loire-Inferieure*, first and second edition) ; **41**, Thomas of Nantes, a man was bitten in the left foot ; **42**, Merel, Boussay ; **43**, Dr. Bourdin, a woman, æt. sixty-one years, was bitten in the foot ; **44**, same, case of a child ; **45**, Drs. Clochard and Guitter, a child, æt. six years, was bitten on the right hand ; **46**, Dr. Duchaine, a child, æt. six years, was bitten on the foot ; **47**, Drouet, a man, æt. sixty years, was bitten on the left hand ; **48**, Dr. Clochard, a man, æt. nineteen years, was bitten on the left leg ; **49**, M. Pestre, a woman, æt. fifty-four years, was bitten on the right hand ; **50**, Riviere, case of a woman ; **51**, Lihoreau, a woman was bitten on the hand ; **52**, Viaud Grand-Maraïs, a boy was bitten on the hand ; **53**, same, another case ; **54**, same, general remarks ; **55**, Dr. J. B. Feuyrier, *Deux Cas de Morsure de Serpent Venimeux*, Paris, 1874, a child, æt. ten years, was bitten on the hand.

Mind.—Delirium and raving,³⁴.—Delirium with vomiting,⁴⁰.—Somewhat delirious in the interval of fifty minutes between the bite and death,³⁹.—Appeared wandering, as if drunk, and answered questions in a mumbling incoherent manner (in two hours),³¹.—During the night sick with delirium and vomiting, followed by profuse perspiration,⁴⁰.—Extremely melancholy, delirium alternating with sopor (after two hours),⁹.—Irrational talking, with sleeplessness and pains,⁴⁰.—Screaming, followed by convulsions,³⁹.—Great agitation and anxiety,⁵⁴.—[10.] Great depression,²⁷.—Very great uneasiness of mind,¹¹.—Premonition of death,³⁹.—Anguish,⁵⁰.—Anxiety and vomiting,³⁹.—Great anxiety,⁴⁸.—Indescribable anxiety preceding death,³⁹.—Intellectual torpor,⁵⁴.—Intellect confused (after two hours),¹⁰.—State of great intellectual torpor,⁵⁴.—[20.] Loss of mental functions, with drawn features,⁴⁰.—Stupor,³⁵.—Stupefaction, with cutting pain in the abdomen,³⁹.—Loss of consciousness and a paralytic condition,³⁹.—Loss of consciousness with swelling,³⁹.—Loss of consciousness and sinking down,³⁹.

Head.—Confusion in the head,³⁴.—Vertigo,^{6, 38}.—Frequent vertigo,⁴⁰.—Vertigo, headache with nausea,⁴⁰.—[30.] Vertigo, headache and vomiting,⁴⁰.—Vertigo frequently recurring, with nausea and vomiting, so that he fell into a faint,⁴⁰.—Staggering with vertigo and falling forward,³⁹.—Giddiness increased to loss of vision,³⁴.—Stupefaction of the head (after half an hour),³⁹.—Dulness of the head,²¹.—Head felt heavy (after ten hours),¹.—

Violent headache,³⁵.—Persistent headache for several days,⁵⁴.—Raging pains in the head, jaws, and abdomen, with general spasms,³⁹.—[40.] Tearing and sticking pain in the head on every change in the weather, chronic effect of the bite,³⁹.

Eye.—Eyes glistening with the headache,⁴⁰.—Eyes pressed out, with swelling of the face,³⁹.—In a short time the eyes became red, inflamed, and very watery,³⁹.—Eyes sunken,³⁹.—The eyes immediately became dark yellow,⁴⁰.—**Lids.** Paralysis of the lids (second day),⁵⁵.—Lids dropped over the eyes,⁵⁵.—**Ball.** Eyeballs immovable,⁵⁵.—**Pupil.** Pupils dilated (after two hours),^{9 12 55}.—[50.] Right pupil contracted, the left dilated (second day),⁵⁵.—**Vision.** Vision became indistinct (after two hours),^{10 55}.—Vision of the right eye lost, of the left dim (second day),⁵⁵.—Obscuration of vision, though he hears everything distinctly,⁴⁰.—Loss of vision,³⁴.—Loss of vision for several minutes during the excessive violence of the attack, though voices were still recognized,³⁹.

Nose.—Blood from the nose with vertigo, with anxiety,³⁹.

Face.—Staring look,³⁹.—Face expressed terror,⁴⁵.—Great anxiety expressed in countenance (after six hours),²⁹.—[60.] Countenance, naturally pale, has now an appearance of anxiety about it,²⁷.—Countenance pallid, extremely anxious, covered with drops of perspiration (after half an hour),²².—Face pale,³⁹.—Pale face with chilliness,³⁹.—Extreme paleness of the face,⁵⁵.—Face pale and hippocratic, with cold sweat on the forehead (after two hours),².—Face pale yellow,¹³.—The face soon became yellowish, and assumed an expression of anxiety,¹¹.—Face livid, with an subicteric color,⁵⁴.—Excessive swelling of the face,⁴⁰.—[70.] Swelling, especially of the lips and eyelids,⁴⁰.—Face swollen and anxious,¹⁷.—Enormous tumefaction of the face (after two hours),³.—Face swollen, and nearly double its usual size; the neck also participated in the swelling,².—Excessive swelling of the face in a few minutes, so that he could not open his eyes, neither like erysipelas nor oedematous, not very painful, but very tense and blackish, with closure of the throat for eight days,³⁹.—After ten years there was still oedematous puffiness of the face at the place of the bite,³⁹.—Entire face presented a swollen appearance, and the parts immediately adjacent to the bite were discolored, of a livid hue (after two hours); diffuse cellular inflammation extended from the wound to the neck and sternum, and to the opposite side of the face (second day),³¹.—Features considerably altered; the cheeks puffed; the lips and tongue enormously swollen, but not painful, covered with saliva, and very pale (after one hour and a half). The swelling of the tongue rapidly increased, so that it at last almost filled the cavity of the mouth, and caused great difficulty of breathing,⁵.—Face convulsed (second day),¹².—Lips blue,³⁹.—[80.] Lips and tongue livid, swollen and protruding,³⁴.—Acid burning sensation in the lips, mouth, and throat,³⁴.—Raging pains in the jaws,³⁹.—The lower jaw has no longer any power,³⁹.

Mouth.—**Gums.** The gums often have the scorbutic line,⁵⁴.—

Tongue. Tongue dry, swollen,¹³.—Tongue swollen, brownish black, protruding from the mouth,⁴⁰.—Tongue swollen, can be protruded but slowly, and in a small degree, and is evidently directed to the side affected; voice hesitating and thick, and somewhat resembling a man suffering from intoxication (after half an hour),²².—His tongue began to swell, so that he could not articulate,⁶.—The tongue immediately swelled so much that when he reached the nearest village he was unable to speak; the swelling increased rapidly, so that his tongue hung partly out of his mouth, and two hours afterwards he died,⁴.—[90.] A few minutes after the bite the tongue began to swell, and on the next morning he was found sitting up in bed,

anxious, gasping for air, face pale, with an expression of the greatest anxiety, terrible swelling of the submaxillary and parotid glands, the tongue was immovable, blue, enormously swollen, protruding from the teeth, filling the whole cavity of the mouth, constant dribbling of saliva,²⁸.—The tongue at once became enormously swollen, and during the night the man could hardly breathe. The next day the tongue was scarified, but the swelling soon returned again, and he fell to the ground in a state of asphyxia. The respiration and pulse were now completely suspended; the face became purple, and the neck swelled to such a degree, that its circumference exceeded that of the head,¹⁷.—Enormous swelling of the tongue (though bitten in the foot),⁵⁴.—In fatal cases the tongue became fuliginous, and the breath fetid,⁵¹.—Protrusion of the tongue, paleness,³⁹.—Tongue black, dry,²¹.—Black tongue,¹⁸.—Tongue white in the middle, moist on the edges, with thirst,⁴⁰.—Tongue coated with a white fur (second day),³¹.—Tongue generally white, slightly tremulous,²⁷.—[100.] Tongue yellow, tip red,¹⁹.—Thickly-coated tongue, with headache and bad appetite,⁴⁰.—Tongue discolored,³⁹.—Dry tongue (after two hours),⁹,³⁹.—**General Mouth.** Mouth and throat so parched and swollen that to swallow any liquid was impossible,³⁴.—Swelling of the mouth after sucking the wound,³⁹.—**Saliva.** White saliva flows from the mouth, with deathly faintness,³⁹.—**Speech.** Speech difficult, with swollen tongue and closed jaws,⁴⁰.—Replies with difficulty, in a deep voice,⁵⁵.—Stammering a few unintelligible words, with weakness and sleepiness,⁴⁰.—[110.] Speech thick and inarticulate,³⁴.—Speech inarticulate (third day),¹⁸.—Loss of speech on account of weakness,³⁹.

Throat.—Closure of the throat, so that for eight days she could only swallow water and milk; afterwards biting in the fauces, the swelling of which became blackish,³⁹.—Pain in throat, with some difficulty in deglutition, and on examination a copious secretion of viscid mucus was seen to be adherent to the pharynx (after two hours),³¹.—Violent pain in throat,⁶.—Deglutition was greatly impeded,¹⁶.—Great difficulty in attempting deglutition,²².—Salivary glands tumified,¹⁷.—Swelling like a goitre on the throat, remaining a chronic result,³⁹.

Stomach:—Appetite and Thirst. [120.] Complaints of hunger and thirst just before death,³⁹.—Complete loss of appetite,¹⁹.—Thirst,³⁴.—Great thirst (after ten hours),¹,¹³, etc.—Troublesome thirst and craving for cold drinks (after half an hour),²².—Thirst with the heat,³⁹,⁴⁰.—Thirst, with moist tongue,⁴⁰.—Febrile thirst, with shivering,³⁹.—Desire for water during the coma,⁴⁰.—**Heartburn.** Cardialgia,⁵².—**Nausea and Vomiting.** [130.] Nausea,³,⁸, etc.—Sickness at stomach and vomiting (within less than half an hour),¹⁶.—Nausea and slight attempt to vomit, which appear to aggravate the suffering (after half an hour),²².—Nausea is caused by sucking the yellow poison from the wound, which had a flat taste,¹⁰.—Nausea, with shuddering,³⁹.—Violent nausea, with oppressed respiration,³⁹.—Nausea, spasmodic vomiting (after two hours),¹⁰.—Violent nausea, with vomiting,³⁹.—Nausea and vomiting,¹¹,⁴⁹.—Nausea and bilious vomiting,⁴³.—[140.] Immediately inclined to vomit, with attacks of faintness,³⁹.—Violent retching,³⁴.—Frequent efforts of vomiting (second day),¹².—Spasmodic retching and bilious vomiting affording transient relief,⁸.—Vomiting,³,⁵, etc.—Frequent vomiting,¹⁵,¹⁶, etc.—Immediate vomiting,³⁹.—Vomiting, with violent thirst,³⁹.—Vomiting, with colic,⁴⁰.—Vomiting, with colic and thirst,³⁹.—[150.] Vomiting, purging, and urinating,⁴⁰.—Vomiting, with diarrhoea,⁴⁰.—Vomiting and diarrhoea, lasting a long time,³⁹.—Vomiting, with distension,⁴⁰.—Vomiting, with faintness,³⁹.—Vomiting, with shivering and violent

thirst,³⁹.—Vomiting, with coldness of the body,³⁹.—Vomiting, with erysipelas,³⁹.—Vomiting, with great weakness; somewhat better after repeated vomiting (second day),³⁹.—Violent vomiting and diarrhœa constantly, renewed with great violence,³⁹.—[160.] Vomiting after drinking milk,³⁹.—Vomiting affords relief,³⁹.—Drink can be borne by the stomach only after seven days, food only after fourteen days,⁴⁰.—Bilious vomiting,³⁹ ⁴⁰.—Vomited, first alimentary matter, then bile, the last repeatedly,²⁴ ²⁵.—Vomiting of mucous and bilious matter,².—Vomiting of a bitter yellow fluid (after twenty minutes),²⁹.—Constant vomiting of bilious matter (in two hours),³¹.—Vomited a large quantity of bile,⁶.—Luce-sant vomiting of a viscid greenish fluid, in color and taste like inspissated bile, followed by severe attack of bilious diarrhœa,⁷⁴.—[170.] After a few minutes she became faint and vomited a large quantity of black blood, followed by bloody stools; these bloody evacuations upward and downward were repeated at short intervals,³¹.—Vomiting of blood,³⁶.—Vomiting of blood, followed by prostration and death,⁵⁴.—Vomiting of green liquid,¹⁹.—Incessant vomiting of green substances,⁹.—**Stomach.** Digestion slow,⁵⁴.—Pain in epigastrium and stomach (after one hour and a half),⁵.—Pain in the pit of the stomach and in the bowels was excruciating,³⁴.—A sensation of uneasiness about the epigastrium,²⁷.—Extreme degree of pain at epigastrium, the least pressure causing great suffering (after half an hour),²².—[150.] Sudden attack of severe pain at scrobiculus, with considerable thirst,²².—Pain in the epigastrium or umbilical region is almost always present, accompanied by anxiety and vomiting, and, in many cases, excessive thirst, though the patient cannot tolerate much liquid; substances vomited bloody and mucous; stool diarrhœic and bloody,⁵⁴.—Terrible pain in the epigastrium,⁵⁴.

Abdomen.—Hypochondria very tense,¹⁹.—Extreme soreness of hypochondria,²⁴.—Intense pain about umbilicus, greatly augmented by pressure (in two hours),³¹.—Swelling of the abdomen, raging pains and spasms, even to faintness; after drinking milk vomiting of a large mass of round worms; since that time the patient has been completely free from the worm troubles which he had before,³⁹.—Sudden flatulent distension of the abdomen, with colic, violent pain in the back and vomiting,⁴⁰.—Abdomen tense, pressure causes distension of the facial muscles,³⁹.—Rumbling in the bowels,²¹.—[190.] Pains in the abdomen and back,³⁹.—Pain in the abdomen alternating with pain in the limbs, after the bite,³⁹.—Pain in the abdomen, with violent thirst and vomiting,³⁹.—Colic,²⁵ ⁵¹.—Colic, with profuse diarrhœa (third day),³⁹.—Colic, with headache instantly, which completely stupefies; with vomiting and violent swelling and blueness of the foot,³⁹.—Violent griping in the abdomen,³⁹.—Cutting colic,³⁹.—Violent pain in belly,²⁴.—Violent pains in the abdomen, immediately,³⁹.—[200.] Violent pains in the intestines and in the shoulders,³⁹.—Raging pain in the abdomen, afterwards also in the jaws and head, exceedingly like destruction,³⁹.

Rectum and Anus.—Pain and tenesmus in the rectum,³⁹.—Urging to pass stool and urine,⁴⁰.

Stool.—Diarrhœa,²¹.—Much purged (after twenty minutes),²⁹.—Diarrhœa and vomiting,³⁹.—Diarrhœa with colic,³⁹.—Diarrhœa; bowels have acted five times since last night, 9 A.M. (second day),²⁷.—Bilious purging,²⁴ ²⁵ ³⁴.—[210.] Bowels acted frequently and involuntarily, and both blood and mucus were mingled with the motions (after two hours),³¹.—Involuntary stools,³ ³⁹.—Copious stools (after two hours),¹⁰.—Numerous stools, with urging, shivering, and thirst,³⁹.—Evacuation of the bowels soon after the bite,³⁹.—Evacuation of the bowels very offensive, black (after two

hours),⁹.—Bloody stools,³⁹.—Discharge of much blood from the bowels, just before death,¹⁰.—Discharge from the bowels of black coagulated blood,³².—Stool on the second day consisting of masses of dark, horribly offensive blood, apparently from the scarification of the tongue,²⁸.—[220.] Stools very fetid,².

Urinary Organs.—Sticking pains in the kidneys,³⁹.—Desire to micturate, but could not (after twenty minutes),²⁹.—Involuntary micturition,³⁹.—Increased secretion of urine,⁴⁰.—Frequent emission of watery urine,¹⁹.—Copious secretion of clear urine, with constipation and headache,⁴⁰.—Profuse emission of urine, with pains in the back and abdomen, vomiting and purging,⁴⁰.—Incontinence of urine and fæces at times,³⁸.—The urine is usually completely suppressed,⁵⁴.—[230.] Strangury,³⁸.

Respiratory Organs.—Anxious respiration, as in croup, with threatening asphyxia,⁵¹.—Respiration very anxious,¹³.—Anxious, oppressed respiration (after two hours),⁹.—Respiration was short and oppressed (after ten hours),¹,¹⁸.—Difficult respiration,¹⁰,¹², etc.—Difficult breathing, with sticking pains in the heart,⁴⁰.—Great difficulty of respiration,¹⁸,⁴³.—Dyspnoea,²².—Suffocative sensation, with retching,⁴⁰.—[240.] Suffocation,⁵⁰.—He tore his shirt because suffocation threatened, preceded by vomiting,⁴⁰.—After being carried to the hospital the patient suddenly ceased to breathe, the heart stopped, the face became livid, etc., whereupon tracheotomy was immediately performed; blood drawn from the arm flowed scantily, was dark mixed with bright streaks,²⁸.

Chest.—Swelling of the chest, with difficulty of breathing,³⁹.—Soon after the bite on the face the chest became excessively swollen, without difficulty of breathing, and the abdomen swollen as far down as the navel,³⁹.—The veins in the chest and abdomen became thick and hard like quills,³⁹.—(Edema of the lungs precedes death,³⁸.—Double pneumonia,⁵¹.—Oppression of the chest, with anxiety,⁴⁰.—Oppression of the chest, with great præcordial anxiety,¹⁹.—[250.] Oppression of the chest, with violent efforts to breathe and to swallow,⁴⁰.—Violent pains in the chest,³⁹.—The patient complained of flying pains in the chest (after ten hours),¹.—Burning on the chest and abdomen, and longing for cold applications, though the skin was very cold to touch,³⁵.—Pressure over the four or five ribs of the right side causes pain (after half an hour),²².—Violent pain in the thorax and left side (third day),⁴³.

Heart and Pulse.—**Præcordia.** Præcordial anxiety,³⁸.—Great præcordial anxiety,⁵⁴.—Indescribable sensation of anxiety in the præcordial region,²¹.—Dragging pain in the heart, so that he tears all his clothes, becomes faint and sinks down with weakness, with violent distress in the abdomen, violent vomiting ten times, deathly paleness, icy coldness of the body, blueness and blackness of the bitten finger,³⁹.—[260.] Great anxiety of the heart, with soreness of the foot that had been bitten, and paralysis of the right arm, at the same time, for four years,³⁹.—Pain at the heart and faintness,⁴⁰.—Short sticking in the heart,⁴⁰.—Sticking pains at the heart, with great weakness, difficulty of breathing, and cold sweat,⁴⁰.—**Heart's Action.** Pulsation of heart feeble; no pulsation was felt in the radial or carotid arteries, whilst that in the crural was very strong,².—Action of heart feeble (after two hours),³.—Heart's impulse remarkably feeble,²⁷.—Want of pulsation in the radial and carotid arteries (after two hours),³.—Beat of the heart slow,⁴⁰.—**Pulse.** Rapid pulse, with unquenchable thirst,³⁹,⁴⁰.—[270.] Pulse rapid and feverish,³⁹.—Pulse small and rapid,⁴³,⁵⁵.—Pulse small and rapid, after the coma,⁴⁰.—Pulse small, rapid, with chilli-

ness and cold sweat,⁴⁰.—Pulse thready, rapid (after two hours),⁹.—Pulse small, rapid, scarcely perceptible,¹³.—Pulse rapid, small, and hard; heart's action tremulous, with oppression of the præcordium,¹⁹.—Pulse low, quick, and interrupted (second day),¹⁸.—Pulse in the healthy arm was quick, strong, and full; on the contrary, that of the wounded arm was small and low (after ten hours),¹.—Pulse small, nearly 100 (after half an hour),²².—[280.] Pulse 96, soft,²⁷.—Pulse intermittent and small,⁴⁰.—Pulse extremely slow, full, and hard, with stiffness, coldness, and sweat (after half an hour),⁴⁰.—Pulse slow and weak,³⁹.—Pulse irregular, small, rapid, contracted,⁴⁰.—Pulse irregular, very weak, with vomiting and diarrhoea,³⁹.—Pulse intermittent, irregular, small, rapid, and contracted, with fever,^{39 40}.—Pulse small, rapid, contracted, irregular (after half an hour),¹⁰.—Pulse irregular,^{39 40}.—Pulse thready and intermittent (third day),⁴³.—[290.] Pulse small,^{17 38}.—Pulse weak, with sopor,¹⁰.—Pulse weak and irregular,³⁹.—Pulse extremely weak, with violent pains,³⁹.—Pulse weak and unusually slow,³⁹.—Febrile pulse (second day),⁴³.—Pulse febrile, slow,¹¹.—Pulse thready and intermittent, followed by syncope, profound prostration, and death,⁵⁴.—Pulse intermittent and very weak (after one hour and a half),⁵.—Pulse small, contracted,^{28 29}.—[300.] Pulse scarcely perceptible, followed by death, after twelve hours,¹⁵.—Pulse scarcely perceptible,^{12 24 31}.

Back.—Pains in the back and abdomen,^{39 40}.—Pains in the loins,⁴⁰.

Extremities.—Limbs swollen, painful,³⁵.—Swelling of the whole limb,¹⁶.—Swelling of the whole extremity, which was covered with bluish-red spots,¹⁵.—The whole extremity was very much swollen and hard, with inflammation of the superficial veins; the boy complained of total loss of sensation in the extremity,¹⁵.—The limb became swollen, like a phlegmonous erysipelas, with an ecchymosis around the bite,²⁵.—Pain, with oedema of the limb, the volume of which had become double its natural size (after two hours),³.—[310.] Limb swollen, red, covered with yellow spots,⁴⁰.—The limb becomes swollen, blue and black,³⁹.—Dark-red swelling of the bitten limb,³⁹.—On the third day the whole extremity was swollen as far as the abdomen, with feverish coldness of the limb,³⁹.—The whole limb speedily became enlarged, blue and black, even the abdomen was distended,³⁹.—Erysipelatous inflammation of the whole limb,⁵⁴.—Swelling of the limb, with black spots; the swelling extended to the abdomen, was followed by syncope and death,⁴⁶.—Great oedema of the extremity,⁵⁰.—Dark color and great swelling of the affected limb,³⁹.—The limb became excessively tumefied, covered with livid spots,⁵².—[320.] The extremity became excessively swollen and ecchymosed; at the place of the bite there were several ulcers, which exuded a sanious liquid,⁴¹.—The extremity became enormous in size, and covered with phlyctenules (second day),⁴³.—Excessive swelling of the limb; the swelling became doughy, the temperature elevated, the cutaneous veins looked like red stripes; every attempt to move the limb caused violent pains,¹⁹.—Gangrenous spots on the limbs,⁵⁴.—The bitten limb had a yellowish-green color, with livid spots,⁵⁴.—Paralysis of the bitten limb for several years, even involving half of the body,³⁹.—Different limbs and even the whole half of the body paralyzed for the remainder of life,⁴⁰.—Loss of power to move the muscles and tendons,³⁹.—Limbs in a state of relaxation (after one hour and a half),⁵.—Trembling of the limbs, painful,³⁹.—[330.] The limb was benumbed,³⁹.—Cramps, especially in the flexor muscles,³⁸.—Excessive pain in the whole extremity,⁴³.—Pains in the limbs, alternately with pains in the abdomen, chronic results,³⁹.—Violent pain in the bitten limb, and stitches in the tips of the fingers,⁴⁰.—Pain in the ex-

tremity aggravated by touch,⁴³.—Peculiar crawling in the soles of the feet (after half an hour); afterwards also in the palms,⁵.—For twelve years she had a recurrence of painful symptoms in the bitten limb, at the time of year corresponding with the time she received the wound,²⁶.

Superior Extremities.—Paralysis of the upper limbs after a bite on the foot,³⁹.—Paralysis of the right arm, recurring for years after a bite on the foot,³⁹.—[340.] Edema extending to the shoulder,⁴⁹.—The arm, shoulder, chest, and back of the side bitten becomes greatly swollen and inflamed,³⁹.—Arm swollen, reddish blue,¹¹.—The whole extent of the right arm was enormously swollen, and its surface was of a livid red color (second day),¹².—On the third day the arm was slightly swollen, red, covered with spots, soft, and without pain,³⁹ ⁴⁰.—The arm was greatly swollen and discolored; it retained for many years a sickly color, until death, which took place suddenly in the night (in an old woman),³⁹.—The bitten finger became bluish black, the wound was surrounded by enormous blisters, the hand and arm were greatly swollen, of a grayish-yellow color; scarification over the wound caused oozing of very black blood,¹³.—The bitten part soon became hot, swelled, and the finger contracted; the contraction and swelling soon affected the arm, the latter extending above the elbow; the whole of the right arm was much swelled, especially about the joints (after ten hours),¹.—On the second day the arm was swollen and puffy, as if he had dropsy,³⁹.—Finger white, but little swollen; the back of the hand very much swollen; red lines reaching to the elbow; forearm not much swollen or discolored, but rather tender (after six hours); arm much swollen and ecchymosed, the discoloration extending to the axilla; the glands in that region also much swollen and inflamed, morning (second day); inflammation subsiding; ecchymosis extending down the side to the crest of the ilium, evening (second day); ecchymosis deepening in color (third day); color decreasing and becoming browner (eighth day); forearm and elbow very hard, and the patient complained of stiffness and pain in attempting to bend the elbow (tenth day),³⁹.—Part swollen, with tingling pain and sense of coolness (after one hour and a half); in a short time afterward the swelling increased enormously. It seemed to be of the nature of edema, and its appearance indicated that gangrene would speedily supervene. The temperature of the part was lower than it usually is all over the arm, up to the axilla, to which part, in fact, the swelling had extended,².—[350.] Immediately felt a sensation of burning and smarting, and soon after the thumb became deadly white, and the lividity of the forearm came and went; during the evening the stiffness, which had been present slightly, began to increase; the arm became swollen, and lividity became permanent. These conditions became aggravated during the night, and in the morning presented the following appearance: the part looks sloughy and inflamed, and swelling extends from this point throughout the entire limb, terminating at the shoulder. Lividity commences on the posterior aspect of the thumb, prevails on the inner side of the dorsum of the hand, where it becomes a bluish tint, and gradually assumes the appearance of ecchymosis as it approaches the forearm. Here, and upon the upper arm, the ecchymosis is general, of a bright-red color in places, in others blue and black, and everywhere tintured with livid spots. The discoloration upon the posterior aspect of the forearm and arm is gradually shaded of a less intense hue. The discoloration and tumefaction terminate at the axilla. Pain on pressing the thumb. A general feeling of soreness extends over the extremity, not aggravated, however, by pressure,²⁷.—The

bitten thumb became black, the hand swollen and spotted. On the second day the arm was covered with spots, above the elbow sores filled with liquid,³⁸.—Feeling as if the poison extended from the bitten thumb to the shoulder and then to the abdomen,³⁹.—Pains in the shoulder,³⁹.—Immediately intense pain in the wounded part, in a short time extending along the forearm to the middle of the elbow, and thence to axilla; he described this pain as being of a burning character, and almost directly followed by great swelling of the hand and wrist; as the pain extended, its severity in the wounded part itself somewhat diminished. Simultaneously with its reaching the axilla, a pain or feeling of constriction was experienced about the head, throat, and right side of tongue, accompanied also with a sense of heat about these parts,²².—The pain in the swollen arm was very distressing,¹¹.—Intolerable pain extending from the arm to the chest,⁴⁰.—**Forearm.** Yellow color of the forearm,⁴⁰.—*Subsultus tendinum*,⁶⁴.—**Hand.** Swelling of the hand,²¹ ⁵¹.—[360.] Even the hand not bitten became swollen,⁴⁰.—Swelling of the bitten hand, with stitches, on motion,⁴⁰.—Swelling of the hand with pain, as if it would burst, painful to touch, oedematous, not pitting on pressure,³⁹.—Even after the third day the hand was greatly swollen and stiff,³⁹.—Sticking pains in the bitten hand, which swells and becomes very large,³⁹.—**Fingers.** Burning and swelling for several days of perfectly sound fingers (from only rubbing a stick with which the head of a snake had been bruised),³⁹.—Oedematous swelling of the finger bitten, and of the whole forearm,³⁹.—The bitten finger became bluish black,³⁹.—Swelling of the bitten finger and hand, with stupefaction,⁴⁰.—Swelling of the bitten finger and nausea,⁴⁰.—[370.] Violent tearing pains extending from the bitten fingers to the wrists, elbows, shoulders, and chest, with uneasiness, vomiting, and sleeplessness,⁴⁰.—Violent sticking pain in the bitten thumb, piercing its tip, then spreading over the whole arm, followed by a sensation of a flame of fire flickering and burning through the arm,³⁹.—Sudden violent pains in the fingers, after the bite,³⁹.—Violent sticking pains in the bitten finger (fourth day),³⁹.—Stitches in the tips of the fingers of the bitten arm,⁴⁰.

Inferior Extremities.—Convulsive movement of the lower extremities,⁶⁴.—Shuffling gait caused by paralysis, chronic result,³⁹.—Paralysis of the leg and a feeling as if dead,³⁹.—Weakness of the lower extremities,³⁹.—Severe cramps in lower extremities,³⁴.—[380.] Great swelling of the leg, as far as the abdomen, which was bluish brown with blackish spots about the bite,¹⁴.—The whole leg becomes enormously swollen as far as the abdomen, and of a quite black color,³⁹.—The bitten limb became excessively swollen as far as the abdomen, blue and yellow,³⁹.—Pain in the bitten leg like the sting of a wasp, or as after a drop of Sulphuric acid on a sore spot,⁴⁰.—Immediately he felt as if something moved upwards along his thigh,²¹.—**Knee.** Knees stiff for a year after,³⁹.—The knee remained stiff for a long time, flexion was difficult and painful, when walking,⁸.—The boy complained of tension about the knee and ankle-joints (after one week),¹⁵.—On every change in the weather, sticking and tearing in the knee and head, after fifty years,³⁹.—**Leg.** Moderate degree of tumefaction in the leg, from the toes to near the knee, but without pain or discoloration, except a small circle of redness around the wound. The wound was filled with a drop of lymph, which was no sooner wiped off than it was succeeded by another (after four hours),²³.—[390.] The limb swelled rapidly up to the knee, and soon to the abdomen, became double its normal size, the swelling was pale green, red, and yellow,³⁹.—The bitten spot became

dark blue, the limb swollen as far as the knee, immovable, insensible to hard pressure or cutting.³⁹—The bitten leg swollen and yellow.³⁹—Leg swollen, as cold as ice, and as insensible as a piece of wood.³⁹—Leg swollen, as if puffed up by air, with great pain.³⁹—After two or three hours, pain in the wound, and towards morning the foot was inflamed and swollen as far as the knee; there was some swelling even after three months, followed for several years by paralysis of the foot, so that he was unable to ride horseback.³⁹—**Foot.** The bitten foot was swollen up as far as the knee, hard and bluish red, and remained swollen for several years.³⁹—Paralysis of the foot which had been bitten several years before, preventing riding horseback.³⁹—The foot seemed shortened, so that he limped when walking, chronic result of the bite.³⁹—Paralysis of the foot, afterwards ulcers, chronic result.³⁹—[400.] Paralysis of the foot, with shuffling gait.³⁹—Paralysis of the whole bitten foot, after several years.³⁹—Swelling of the bitten foot and chronic suppuration, after forty years.³⁹—The swollen foot became indurated, bluish red, and remained so for several years.³⁹—On the fifth day, the foot became gangrenous, and the swelling extended to the knee.³⁹—Foot swollen within half an hour, with much pain, as if it had been blown up with air, and two bluish-yellow stripes, as broad and as large as the thumb, gradually extended along the leg to the thigh and to the abdomen.³⁹—The bitten foot and leg swollen, almost black, together with the whole abdomen.³⁹—The foot becomes blue and swollen.³⁹—Aching in the bitten foot returned yearly.³⁹—Sticking and tearing in the bitten foot on every change of weather for years.³⁹—[410.] Dragging of the foot, chronic result.³⁹—Burning in the whole of the bitten foot.³⁹—The whole toe became blue and swollen, also the back of the foot after a short time.³⁹

Generalities.—Persons become prematurely old; the development of children is arrested.⁵⁴—Modification of the functions of the blood becomes apparent, the fibrin is altered, the globules are less able to perform their proper functions, with tendency to hæmoptysis, especially epistaxis; the blood coagulates imperfectly.⁵⁴—Symptoms of chronic cachexia after the bite.⁵⁴—Every year subsequent to the bite, at the first hot weather, he was seized with a painful œdema of the limb, colic and efforts to vomit; digestion became disturbed; he was tormented with somnolence, the gums became fungoid, and his skin had an icteric tint; he was chilly, with great physical and intellectual weariness.⁵⁴—The symptoms subsequent to the bite have a periodic character, with tendency of the cachectic symptoms to return. In a large number of cases there is for many years a return of the troubles on a certain day every year, the swelling, pain in the bitten limb, prostration, loss of appetite, nausea, and jaundiced hue of the skin. One girl in Nantes had for years at the period of the bite an eruption of livid spots on the bitten limb. A young man had for years, at the anniversary of the bite, general malaise, swelling of the limb, and development of spots.⁵⁴—In many cases, after about eighteen months to two years, there is a marked tendency to apoplexy; the death is due to cerebral congestion or hæmorrhage.⁵⁴—Each subsequent year, at the anniversary of the bite, he suffered from troubles of digestion and debility, and after four years died of apoplexy.⁴²†—[420.] The chronic local effects consist of permanent alteration of the tissues; in some cases the œdema persists for a very long time; in others there is tendency to ulcers or blisters.⁵⁴—Ecchymoses ap-

† This person had always enjoyed excellent health, and had never shown any tendency to cerebral troubles.

peared in the endocardium and pericardium; the lungs were hyperæmic, the mucous membrane covered with ecchymoses, the tissue œdematous; the mucous membrane of the intestines was ecchymosed; the blood did not coagulate,³⁸.—General chilliness; nausea; vomiting; somnolence; great dyspnoea; black spots on the limb and even over the abdomen; temperature depressed, as in cholera,³⁴.—Falling to the ground in a faint, vomiting several times, lying as if completely paralyzed and unconscious, with involuntary stools and urine, followed by death after half an hour, without swelling or spasms,³⁹.—Intoxication, with sleep, exhaustion, loss of vision, with difficulty of breathing, retching and vomiting, spasms, violent pain in the umbilical region, tension of the abdomen, pulse small and rapid, voice almost lost, wanted to be allowed to sleep, even were it death to him,⁴⁰.—Violent headache, with inclination to sigh, which the pain prevented; restlessness even to despair; eyes glistening; face slightly yellow, cheeks red; violent thirst, with moist tongue, which is white in the middle, red on the edges; pulse weak and small; constantly inclined to faint; pains in the loins, warm dry skin; constipation; copious discharge of clear urine (from Orfila).⁴⁰.—After ten minutes he became thirsty and very much exhausted, which symptoms continued to increase, so that it was with difficulty that he could reach the house. After half an hour violent vomiting and diarrhoea set in, at first consisting of bilious and sour liquid, afterwards only of substances smelling like broth, with most unquenchable thirst. The pulse was scarcely perceptible, the skin pale and covered with clammy sweat; the lips, tongue, and the affected arm œdematous, as far as the elbow, the latter colorless and insensible. In the evening the pulse became stronger, the sweat less. Delirium at times. The swelling of the lip and tongue diminished, but that of the arm extended to the shoulder. On the next day the vomiting and diarrhoea had ceased, the delirium was better, pulse full and strong not rapid, skin hot and dry; lips and tongue normal; glands of the axilla swollen and sensitive; the swelling had extended up the arm and along the spine as far as the right hip. On the third day the delirium had ceased entirely, though the fever was still violent, the swelling continued, and in the lower portion was of a bluish-red color. On the fourth day the redness had extended up the back of the arm, along the back, and on the hip, places upon which he lay in bed were bluish black, though severe pressure caused no pain, indeed the skin over the whole surface of the swollen parts was insensible. The fever and swelling gradually diminished, sensitiveness returned, and on the thirteenth day the patient was able to be about, with only the hand somewhat swollen, and only the index finger insensible,⁴⁰.—Violent pain immediately after the bite, sinking down in a faint, loss of all power; at the same time sensation of heat and shivering shooting like lightning through the body for half an hour, when he was first able to call for help. This was followed by vomiting of bile several times, afterwards with great relief. Thirst, cold clammy sweats, features drawn, eyes protruding, look staring, color dark yellow; pulse very slow, hard and full. Jaws spasmodically closed; talking and swallowing very difficult. Swelling at first of the bitten foot. After emetics vomiting of bile followed by relief, and diarrhoea, warm perspiration and sleep instead of cold perspiration; recovery after fifteen days,⁴⁰.—After a bite on the tongue, the face speedily becomes red, the eyes look like one raving, after three minutes reeling and falling forward; face as usual; speaks of going home, stumbles against an object, so rising and falling, or standing still, reeling and falling again; but then also speaking distinctly;

after a quarter of an hour he remained lying down, face red, eyes dim, complaining of heaviness of the head; jerking of the tongue, which protruded between the teeth, and which was pale and not swollen, began to have a rattling, and died in fifty minutes after the bite (from Dr. Lenz).³⁹. —After a bite on the right ring finger sudden violent pain, some blood flowed from the finger, which began to swell, then she became quite sick, had cold shivering with violent thirst, and frequent vomiting and several evacuations of the bowels, at the same time she was more cold than warm to touch. After nine hours and a half the limb was swollen to the middle of the upper arm, the whole limb painful to touch, pale, very oedematous, only slightly pitting on pressure; associated with paleness of the face and shivering; pulse very slow and weak, with general exhaustion.³⁹.—[430.] Inflammation and enlargement of the lymphatics extending from the bite.⁵⁴. —Black blood flows from a wound near the bite; the cellular tissue is green and blue.⁴⁰.—Swelling and induration about the wound persisted for a long time.⁸.—Swelling began on the next morning, extending from the toe to the neck, involving the whole right side of the body, not in the least the left side.³⁹.—General swelling, with cold sweat and twitchings, followed by death.^{39 40}.—The hand, arm, and even the whole right side of the trunk, began to swell under the violent pain, so that the patient repeatedly fainted away.⁶.—The swelling frequently involves the lymphatics and extends to the body.³⁸.—Swelling and inflammation of the margins of the bite and neighboring parts.^{39 40}.—Swelling of the bloodvessels, with general weakness.^{39 40}.—General oedema.⁵⁴.—[440.] Enormous oedema, nausea, vomiting, syncope, and death, from a bite in the foot.⁵⁴.—General oedema, with profound coma, followed by death.⁵⁴.—Painful tumefaction, followed by vomiting.⁴⁸.—Great tumefaction of the bitten parts.⁵⁴.—General oedema over the whole body (second day); even to the eyelids (third day).⁴⁹.—General oedema, followed by profound coma and death.⁵⁴.—The whole extremity became tumefied and covered with livid spots; this tumefaction extended to the thorax, and was followed by nausea, vomiting, somnolence, difficult respiration, and death.⁴².—Tumefaction of the part bitten is a constant symptom, accompanied by oedema, redness, and heat; the parts become hard, tender, and swollen to twice or three times their normal size; the tumefaction lasts from four to eight days, sometimes persists a long time; the pain accompanying the inflammation consists of tension, which is rarely acute.⁵⁴.—Swelling of the extremity, with livid spots in the skin, followed by general chilliness, dyspnoea, nausea, and vomiting, and death on the seventh day.⁴⁷.—Swelling of the arm and hand began after half an hour, was followed by nausea and vomiting; after an hour and a half the swelling had extended to the shoulder, the arm was hot; the swelling gradually extended to the body over the chest; the upper extremity was of a livid color, covered with black and dark-red spots of ecchymoses; the arm was of enormous size, about that of the thigh, the skin tense, but not painful to pressure, the livid red color disappearing on pressure, but the color of the spots of ecchymoses was not affected thereby, the lymphatic glands of the axilla not much swollen; at the point of the bite blisters of a large phlyctenular form with reddish serum; several of these phlyctenulae developed on the back of the hand. The patient complained of cephalalgia, great vertigo, had a rapid pulse, and pale tongue. After this the hand began to diminish in size, but the shoulder continued very large, covered with black mottled spots; the whole scapular region of the left side and part of the right of a livid red color, with several spots of ecchy-

moses; this red color and these spots extended over the anterior portion of the thorax; the right breast became œdematous and hard, and presented a spot of ecchymoses that extended into the corresponding axilla; apparently this trouble in the right breast, where it was isolated from the rest of the trouble, was caused by a blow; afterwards these ecchymosed spots spread over the lumbar region. On the ninth day the sclerotic was somewhat yellowish. On the tenth there seemed to be an aggravation, the back became more œdematous, and the ecchymoses and infiltration spread over the nates. On the twelfth the ecchymoses had greatly diminished, but the œdema of the upper extremity and shoulder still continued; the hardness was remarkable. On the fourteenth the sclerotic again became yellow; the urine was perfectly clear and transparent. On the fifteenth the œdema of the upper extremity still persisted with a yellowish tint. On the seventeenth day there was still hardness of a portion of the arm and back, but all the ecchymoses had disappeared, though the skin over the arm and back was still yellow; the urine was perfectly clear and transparent; the sclerotic still somewhat yellow.³⁹—[450.] The bitter part becomes black, hard, swollen, and covered with spots.³⁹—After a quarter of an hour the arm began to swell, it became tense and bluish red; together with nausea, violent vomiting, great prostration, and at times inclination to fainting. The bite was found to look like the scratch of a pin, and to extend scarcely through the epidermis, nevertheless the whole hand and arm as far as the elbow was swollen, so that a rather large shirt had to be cut away; there was no pain, either in the wind or in the room, but an unpleasant tense sensation; the skin dark bluish red, with black and yellow spots, and stripes following the course of the cutaneous veins of the arm. The usual fresh and ruddy color of the face had rapidly changed to a very yellow and earthy color, the mood was anxious and irritable; pulse weak, slow; there was also a constant sensation of faintness. The yellow color of the face continued five days, and of the arm ten days.⁷—Finger became swollen and painful; and sense of numbness and rigidity gradually extended up the hand and arm (in five minutes); towards evening the hand and arm became painfully inflamed and swollen to three or four times their natural size. Spots of purpura hæmorrhagica appeared the next day in various parts of the body and limbs. The inflammation, which was of an erysipelatous character, gradually spread from the arm to the shoulder, integuments of the neck, chest, abdomen, and back, on the right side, as low down as the hip. The bright-red hue of the skin began to fade on the fourth day, leaving it of a mottled livid color, with patches of ecchymoses. The œdema of the legs was considerably relieved by finely puncturing with a lancet. At the end of a week I was able to leave my bed, but the hand and arm were quite useless, and did not recover their former powers until six or eight weeks after the accident; the right leg also remained weak for some time, causing me to drag it in walking. After a fortnight, collections of matter formed successively in the finger, hand, forearm, and axilla, requiring evacuation by the lancet.³⁴—After a bite on the foot, swelling and pain suddenly extended to the abdomen; for many years afterwards the leg was always diseased, presented at times yellow, at other times blue spots, and was painful. After various remedies these suddenly disappeared and attacked the eyes; after suffering for a long time she became completely blind for two years. Then the eyes improved, but it extended through the whole body, and gave rise to pains internally, in various parts of the abdomen and limbs. At last she became almost numb.³⁹—The

bitten extremity was covered with leaves, the tumefaction disappeared on the fourth day, and the patient seemed convalescent, but on the seventh day he was seized with extreme suffocation, followed by death,⁴⁶.—The pain was at first exceedingly acute; the wound became livid, and the arm was much enlarged, towards evening; the next morning the swelling encompassed her whole breast, and even extended to the bottom of the true ribs; the third day the swelling extended over the lower part of the abdomen, and her body was considerably increased beyond its natural size,¹⁸.—After being bitten in the finger and sucking it, there was swelling of the finger and also of the mouth, he was obliged to sit down, it was impossible to go forward; he felt as if he would die, became helpless and weak, leaned against a tree, the hands became black and cold, the mouth and abdomen swollen, constantly said that he should die, followed by bloody vomiting, diarrhœa, and death, in an hour and a half,³⁹.—The foot becomes as blue as if washed with indigo, without swelling, after the vomiting and great weakness; the next night he had violent fever with much delirium, and in the morning decided swelling from the bite as far as the neck, the whole right side of the back was bluish, greenish, and yellowish; there was no swelling at all on the left side. Therewith the urine was dark yellow, as in jaundice. So weak that every time he rose he fainted,³⁹.—Subsequently a gangrenous slough formed at the place of the bite, involving the soft tissues, including the tendons of the muscles, which after several weeks sloughed off,⁵⁵.—Gangrenous spots on the foot. After the bite on the foot some drops of blood flowed from the wound which he sucked into his mouth. This was immediately followed by vomiting. The foot swelled and became insensible. The vomiting was incessant, with bleeding from the nose, oppression of the chest, and indescribable anxiety, sunken eyes; distorted face. The foot was greatly swollen as far as the abdomen, grayish yellow, covered with large blisters. After fourteen years the knee still remained stiff and the leg drawn backward,³⁹.—[460.] Whole body pale, and from time to time agitated by fits of shivering (after one hour and a half),⁵.—Paralysis yearly with pain and insensibility,³⁹.—Stiff, rigid, cannot make the slightest movement,³⁹.—Epilepsy one, two, and five years after the bite,³⁹.—Violent spasms,³⁹.—General spasms, with raging pain in the abdomen and head,³⁹.—Restlessness,⁵⁴.—Easy fatigue,⁵⁴.—Weakness,^{38 40}.—Weakness, so that he was unable to stand upon his feet,⁸.—[470.] Weakness, so that he was no longer able to move,³⁹.—Great weakness and sleepiness,⁴⁰.—Extreme weakness, unable to move a limb, having barely strength to speak,²⁴.—So weak that he fainted every time he raised the head,³⁹.—Falling down when standing,³⁹.—Extreme debility,^{5 6}.—Great prostration,^{32 34 35}.—Prostration followed by death (fourth day),⁴⁹.—General prostration of the vital forces,⁵⁴.—General torpor (third day),⁴³.—[480.] Faintness,^{3 5 8}, etc.—Immovable,³⁹.—Sinking down with faintness, immediately,³⁹.—Sinking down with violent pains, after the bite,³⁹.—Faintness, with a feeling of warmth in the head,³⁹.—Faintness, with loss of sight and hearing, almost imperceptible pulse,⁴⁰.—Fell into a faint with alternate vomiting and diarrhœa,³⁹.—Attacks of faintness in rapid succession,³².—Felt so faint that he was obliged to lie down,⁶.—He fainted after walking a few steps, immediately after the bite,¹⁵.—[490.] Fainting alternately with great anxiety and restlessness,¹³.—After half an hour the patient could scarcely stand erect and was faint,¹⁰.—Fell to the ground in a faint and remained so for an hour, until he was awakened by cold water,⁴⁰.—Collapse, followed by death,³⁸.—Loss of acuteness of the special senses,⁵⁴.—Sensitive to every

change of weather,³⁹.—After six years he asserted he still experienced attacks of rather severe pain in the arm bitten, with sensations of lassitude and malaise; these symptoms recurring every year in the month of April, and lasting a month,³⁶.—Violent pain in the part bitten,²¹.—Violent shooting pains through the whole body, spreading from the point of the bite,¹⁹.—Violent pain began at the wound and extended through the whole limb,¹⁰.—[500.] Violent pains after the bite,³⁹.—The pain caused by the bite is not severe, but is followed by a burning sensation, which spreads over the whole limb,³⁴.—The bite was immediately followed by acute pain and by a burning sensation of heat and tumefaction,³¹.—Violent burning pain in the wound, immediately,⁸.—Pains like the sting of a bee in the bite; after a time the wound became leaden gray, and swollen; the swelling began to diminish after two or three days,³⁸.—The bite was felt through the whole body like a streak of lightning, she sank to the ground,³⁹.—The swelling was insensible,³⁹.—When bitten he felt a stitch through the whole body,³⁹.

Skin.—The skin of the hand is dead and comes off like a glove, detached in large plates, the subjacent tissues livid (third day),⁵⁵.—The skin is of a yellowish color,^{18 54}.—[510.] The face and trunk had a jaundiced hue, and the extremities exhibited diffused patches of redness (second day),¹².—The skin of the affected limb was of a yellowish livid hue, mottled,⁴³.—Livid color of the skin,⁵⁴.—Livid spots on the skin,⁵⁴.—The bitten limb became covered with livid violet spots like ecchymoses,⁵⁴.—Livid spots appear later than the swelling, are very characteristic, red, bluish, or blackish, varying in tint and intensity, in different individuals and in different limbs; they usually begin within six to twelve hours after the bite, and on disappearing leave a greenish or yellowish spot, which persists for several days; they consist of true ecchymoses of blood, sometimes followed by gangrenous sloughs,⁵⁴.—Black petechial spots, extending over the whole body, which was cold to touch,³².—Ecchymosed spots in the skin, which, after death, were also found in the membrane of the brain,³⁸.†—Ecchymosed spots in various parts of the body, just before death,¹⁰.—Swelling covered with black and yellow spots,¹¹.—[520.] Very bright blue or almost black spots about the wound,³⁸.—Reddish black spots all over, as large as peas, over the whole abdomen, and even on the face,⁴⁰.—The parts about the wound became very much swollen and very red, and blackish-blue spots appeared on both sides of the thigh and leg, which after twenty-four hours turned yellow, and disappeared after a few days,⁵.—The skin of the arm was of a deep-red color (after ten hours),¹.—Hands violet-colored, covered with phlyctenules (second day),⁵⁵.—A disagreeable herpetic eruption, with extremely distressing itching about the wound, persisted for a long time,⁸.—Roseola-like eruption on the inner side of the arm and down the side of the body,³⁹.—About the bite, bluish-black spots developed and discharged disorganized blood,¹⁵.—Large blisters developed about the bite, which, after an hour, burst and left an ulceration; on the sixth day there was such great destruction of flesh that the muscles were laid bare; the wound was a line and a half in depth, and apparently was not inflamed; the muscles had a dark-red color, were quite dry, and looked like smoked meat, insensible to touch; the sore was offensive,²⁰.—Collections of pus sometimes but rarely appear at the point of the bite,⁵⁴.—[530.] Immediately afterwards the arm became swollen, red, livid, almost purple; and

† Infusion of a bloody serum was found in the ventricles of the brain.

with these local symptoms were extreme anxiety, headache, vomiting, and shiverings. In the course of a few hours a large bulla, with a dull red base, had developed itself over the wound. Afterwards, bullæ of the same description made their appearance all over the body, even on the face, the intermediate space being red and swollen. When ruptured, a very large quantity of turbid serum escaped. This eruption continued from 28th May, 1824, to November, 1825. On the 28th May, 1826, the same phenomena reappeared; the eruption beginning at the seat of the bite, and continuing until November of the same year. And every year, from 1826 to 1863, the history of the patient has been the same, the symptoms beginning in the month of May, with lassitude, anxiety, nausea, headache, etc.; then, after six or eight days of these introductory troubles, the cicatrix becoming red and painful; then tingling and swelling of the arm; then the development of the bullæ exactly as in 1824; the only difference being that the eruption disappears in five or six weeks instead of continuing for five or six months as at first. In the interval the patient is apparently quite well, and a white faint cicatrix is the only visible remains of her troubles.³⁷—Skin generally dry.¹—Skin dry and burning.¹⁹

Sleep.—Disposed to yawn.¹¹—Heavy and drowsy.²¹—Drowsiness.⁵⁵—Sleepy without being able to sleep.⁴⁰—Great inclination to sleep, but the patient was unable to sleep, and was constantly obliged to change the position.¹⁹—Tendency to somnolence.⁵¹—Slept for several hours after the vomiting, felt well on waking.⁴⁰—[540.] Sleep prevented by pains.¹⁰—Very restless during the night (first night).¹⁸—Sleeplessness for three or four nights.³⁴—No inclination to sleep till noon of the second day.³⁹—Loss of sleep.⁴⁰

Fever. — Chilliness. Chilliness.⁵²—Great chilliness.⁵⁴—Constant chilliness, with cold sweat.⁴³—Chilliness, with pale face and thirst.³⁹—Chilliness, with pain in the chest.³⁹—[550.] Chilliness, followed by fever (second day).⁸—Shivering (after two hours).³—Shivering, with flushes of heat.⁴⁰—Cold shivering, with nausea, vomiting, and great thirst.³⁹—Shivering, with febrile symptoms; small, rapid, contracted, at times irregular, intermittent pulse.^{39 40}—Coldness of the body.^{27 40 55}—Surface cold and clammy (in two hours).³¹—Coldness and rigidity, with clammy sweat.⁴⁰—Temperature diminished; resists cold badly.⁵¹—Diminished warmth of the body, immediately.⁴⁰—[560.] Rather cold than warm to touch, with desire for stool.³⁹—Head and upper extremities ice cold.²—Finger cold (after ten hours).¹—**Heat.** Violent fever.¹⁶; towards evening (first day).¹⁶—Violent fever, with delirium (second night).³⁹—The fever persisted for several days, with an irregular type, and necessitated the employment of antiperiodics.⁴³—The reactionary fever after the poisoning assumed the type of an intermittent.⁵²—Heat of the whole body.^{6 53}—Violent heat, followed by shivering.⁴⁰—Burning heat rising from the heel to the tongue.⁴⁰—[570.] Sensation of burning heat through the whole body, with swelling of the hand that was not bitten, so that he could not close it.⁴⁰—Burning heat running up the arm.⁴⁰—Heat, thirst, and restlessness, on the next morning with moderate pains.³⁹—Skin warm and dry, with brain symptoms.⁴⁰—Heat rises from the bitten foot into the tongue.⁴⁰—Burning heat, extending from the bitten spot on the arm up to the chest.⁴⁰—When bitten, heat shoots through the whole body like lightning.⁴⁰—For some minutes after a bite in the heel, a kind of numbness in the foot, followed by a sensation of heat, extending from the point on the foot up through the leg to the abdomen,

chest, and at last to the throat and tongue; this violent heat affected him severely, and caused burning thirst; soon followed by restlessness, febrile shivering, trembling of the whole body, and complete loss of strength,⁴⁰.—Skin hot (second day),⁵⁵.—**Sweat.** Profuse perspiration,^{40 43}.—[580.] Perspiration after vomiting,⁴⁰.—After chamomile tea copious perspiration, except over the bitten limb from the abdomen to the toes,³⁹.—Sweat with the coldness,⁴⁰.—Profuse cold perspiration with difficult respiration,⁴⁰.—Cold sweat, with the most violent attacks,^{39 40}.—Cold perspiration, with sticking at the heart, and faintness,⁴⁰.—Cold sweat,^{8 10}.—Whole body covered with clammy sweat,^{13 40 50}.—Profuse cold clammy perspiration,⁷¹.—Body bedewed with a cold clammy sweat (second day).¹².—[590.] Perspiration relieves,^{39 40}.—No perspiration with the febrile warmth,³⁰.

Conditions.—**Aggravation**—(Change of weather), Tearing and sticking pain in bite; tearing and sticking pain in leg; the symptoms.—(Pressure), Pain at umbilicus.—(Touch), Pain in extremity.

VIPERA LACHESIS, FEL.

Vipera lachesis, *Bufocephalus fel.* (Higgins).

Authority. (E. W. Berridge, M.D., New York Journ. of Hom., vol. ii, 1874, p. 461.) 1, Berridge, took repeated doses of em. (Fincke), for two days; 2, Mr. —, took 6 globules, at 8 p.m., without knowing the name of the medicine.

Mouth.—The tongue, especially at the end, felt smaller, for ten minutes (after three-quarters of an hour),².—Bitter taste in mouth, lasting more than fifteen minutes (after fifty-five minutes),².—Every day since the dose, intense bitter taste in the mouth (fourth day),².—The lower lip, on the inside, felt swollen, and there was a sore feeling as if there was a longitudinal ridge on it; it came on about 10 A.M., lasting the whole day (fourth day),².

Throat.—Feeling in throat of choking; desire to clear the throat; the tongue, especially at the end, felt smaller; desire to loosen clothes round throat; all this lasted ten minutes; he thought he had taken *Lachesis* (after three-quarters of an hour),².

Chest.—Woke at 5 A.M., with a dull heavy pain under left ribs (near cardiac end of stomach), which seemed to rest at the one spot for a few minutes, then slowly moved round to the right in an upward direction to stomach-pit; it remained about an hour, and then went away (second day),².—Twice during day, in the open air, shooting in region of left nipple (fifth day),¹.

Superior Extremities.—In outer side of left arm, shooting downwards, from just below shoulder to elbow (after one hour and twenty minutes),².—Sore painful feeling at end of right thumb (palmar surface), for one minute (after fifty minutes),².

Inferior Extremities.—[10.] 2 p.m., when walking out, a dull heavy pain struck him suddenly in the right hip, in one spot; it seemed to be in the hip-bone; it only remained a few minutes, and then passed away without his noticing it (third day),².—Sore pain behind right internal malleolus (after fifty-seven minutes),².—During the day, tingling in toes of right foot (second day),².

VISCUM ALBUM.

Viscum album, Linn.

Natural order, Loranthaceæ.

Common name, Mistletoe.

Preparation, Tincture of leaves (and berries).

Authorities. 1, Dr. Center, *Charleston Med. Journ. and Rev.*, vol. vi, 1851, 448, two women, æt. eighteen and twenty-one years, took *Viscum* to procure abortion; 2, Henry Belcher, M.D., *Month. Hom. Rev.*, vol. xii, 1868, p. 282, a girl, æt. seventeen years, in whom catamenia had not appeared, but who appeared well, except a severe form of chorea had long troubled her, took 5 drops tincture, three times a day, for a week; 3, Joseph Dixon, *Brit. Med. Journ.*, 1874 (1), p. 224, a boy, æt. fourteen years, ate eight berries; 4, Pröhl, *A. H. Z.*, 96, No. 10 (*Brit. Journ. of Hom.*, vol. xxxvi, 1878, p. 271), took the tincture, beginning with a drop, and increasing every day by a drop until he took forty at a time.

Mind.—Inclined to be violent.³—Spectral illusions.³—Insensibility.³—Stupor, succeeded by almost entire insensibility, lying motionless, with her eyes closed, as if in sound sleep, but easily roused by a loud noise, and then would answer any question, but when she relapsed into her former condition there was a slight disposition to stertorous breathing (second day).²

Head.—Giddiness (second day).^{2, 3}

Eye.—Conjunctiva injected.³—Pupil slightly dilated and fixed.³—Pupils contracted, and at first appeared insensible to light (second day).²

Face.—Countenance suffused.³—[10.] Lips livid.³

Abdomen.—Whole of the alimentary canal paralyzed.¹

Stool.—Bowels obstinately constipated.¹

Respiratory Organs.—Breathing slow and stertorous.³—Slight disposition to stertorous breathing (second day).²

Pulse.—Pulse small, quick, and very irregular (second day).²—Pulse slow, full, and bounding.³

Superior Extremities.—He felt in the dorsum of the left hand as if a large spider were crawling over it; soon afterwards he felt the same sensation in the dorsum of the right hand (after 40 drops).¹

Inferior Extremities.—In the same winter suddenly felt in the right foot a violent aching pain from within outwards, that compelled him to take off his boot, as it felt too tight; this sensation went off in an hour.⁴

Generalities.—About 10 A.M., when he was going to see a patient, he felt very queer, as if he must fall down; he felt a glow that rose up from the feet to the head, and it seemed to him as if he were on fire, at the same time his face became very pale; this kind of aura epileptica recurred three times during the winter (after 40 drops).⁴—[20.] Every muscle of the body, except those of the eyes, were paralyzed.¹—Could not speak or swallow, and both died about the eighth or ninth day, literally starved.¹—Frequent recurrence of the symptoms during two years.⁴

Sleep.—Drowsiness (second day).²

Fever.—Skin warm and very moist (second day).²

VÖSLAU.

The mineral spring at Vöslau in Austria.

Analysis. 100 cubic inches of water contain 15.2 grs. solid constituents; 4.9 grs. carbonate of lime; 2.7 grs. sulphate of lime; 0.5 gr. chloride of lime; 2.7 grs. carbonate of magnesia; 1.8 grs. sulphate of magnesia; 0.4 gr. muriate of magnesia; 0.9 gr. sulphate of soda; 0.4 gr. muriate of soda; 0.4 gr. alumina and silica, 0.2 gr. carbonate of iron; 0.1 gr. gummy substance; 0.2 gr. loss.

Authority. Dr. Rosenberg, Archiv. f. Hom., 20, 1, 162, effects on the healthy.

Mind.—Mind restless and excited.—Irritability, peevishness.

Head.—Vertigo and whirling in the head.—Reeling and tottering of the whole body, two or three hours after a bath.—Congestion to the head and orgasm of blood.—Heaviness of the head.

Stomach.—(The appetite is increased after the first bath.)—Heaviness and sensation of fullness in the stomach.—Sensitiveness and pressure in the stomach after eating.

Abdomen.—[10.] Pressure and tension in the hepatic region, extending to the right shoulder.

Stool.—Thin stools, increasing to diarrhoea, with a slight degree of tenesmus.

Urinary Organs.—Increased secretion from the prostatic glands.—Frequent desire to urinate.—Frequent micturition.—Urine during the first days red, afterwards rather watery, and in large quantity.

Sexual Organs.—Erections.—Rush of blood to the genitals.—Nocturnal emissions.—Many have increased secretions of mucus from the genitals (females).—[20.] Delayed menstruation.—Menses diminished in quantity, accompanied by numerous troubles.—Menses offensive.—Menstruation too frequent and copious.

Respiratory Organs.—Hoarseness and dryness in the throat; painful sensitiveness on swallowing warm food and drink.—Dry cough, with slight pains in the chest.

Chest.—Congestion to the chest and other organs.—Oppression of the chest; respiration difficult, rapid, and short.

Generalities.—Emaciation, in young people.—Uneasiness and unsteadiness at work.—[30.] Weakness and falling asleep of the limbs.—Increased sensitiveness, especially to the external air.

Skin.—Itching nettlerash over the whole body (after fourteen days of bathing), ending in desquamation (after two months).—Itching on the skin with heat and biting, especially towards midnight, previous to the outbreak of perspiration.

Sleep.—Overpowering sleepiness during the day.—Sleepiness, especially in the afternoon.

Fever.—Coldness and chilliness at times changing to heat, with increased thirst.—Flushes of heat, without thirst.—Perspiration in bed, towards morning.

WIESBADEN.

The spring at Wiesbaden (Prussia).

Analysis of sixteen ounces (Fresenius):

Chloride of sodium,	52.49779 grains.
“ of potassium,	1.11974 “
“ of lithium,	0.00138 “
“ of ammonium,	0.12841 “
“ of calcium,	3.61720 “
“ of magnesium,	1.56603 “
Bromide of magnesium,	0.02762 “
Iodide of magnesium,	Trace.
Sulphate of lime,	0.69289 “
Phosphate of lime,	0.00299 “
Arsenate of lime,	0.00151 “
Carbonate of barium,	Trace.
“ of strontium,	Trace.
“ of lime,	3.21055 “
“ of magnesia,	0.07979 “
“ of iron,	0.04339 “
“ of manganese,	0.00453 “
“ of copper,	Trace.
Silicic acid,	0.46018 “
Silicate of alumina,	0.60392 “
Organic matter,	Traces.
	<hr/>
	64.05792 “
Carbonic acid,	6.416 cubic inches.
Nitrogen,	0.103 “
Temperature,	55° R.

Authorities. (1 to 11 from Dr. Apelt, Archiv. 17, Part 1, p. 143, 1838, effects of drinking one to three glasses daily, and of excessive bathing.) **1**, A.; **2**, B.; **3**, C.; **4**, D.; **5**, E.; **6**, F.; **7**, G.; **8**, v. H.; **9**, J.; **10**, K.; **11**, P.; **12**, Magdeburg, Die Thermen du Wiesbaden, 1873, effects on eight healthy persons, who took from 11 to 42 baths during three to fourteen weeks.

Mind.—He becomes more cheerful (after seven days),¹; (after eight days),⁶.—Impatient and depressed, without hope,⁶.—General persistent depression of spirits,¹².—Anxiety and uneasiness prevent sleep,⁴.—Great anxiety, with apprehensive solicitude,².—Ill-humor (second and following days),¹.—Peevish, talks with no one,⁵.—Disinclination to think,¹².

Head.—*Vertigo.* Vertigo,¹²; (after first baths),¹¹.—[**10.**] Vertigo, with falling down, while walking,¹.—Vertigo and whirling in the head, with a kind of insensibility, trembling, faintness, spasmodic hicough, alternations of chills and heat, thirst, hæmorrhage while riding in a carriage (fourteenth day),².—Dizziness and heaviness of the head, while lying in bed, a sensation as if she would fall, seven days after cured,².—Reeling, with moving of objects before the eyes, and staggering gait, as if intoxicated (fifteenth day),¹.—Reeling,¹².—Reeling and tottering of the whole body, with moving of objects before the eyes (eighth day),⁴.—Tottering when walking,¹².—*General Head.* Heaviness of the head,⁵.—Heaviness of the head after talking (fifth day),².—Dulness of the head,¹².—[**20.**] Headache,⁸.—Headache in the evening (seventh day),².—*External*

Head. The hair grows much more rapidly than usual, even after several months.¹—Even though the hair falls out so profusely, it does not become thin, because the new growth is so rapid and thick, and after four months the head is more thickly covered than before.¹—The hair falls out profusely.³—Falling of the hair, followed by a very rapid new growth; the new hair is darker.¹²—The hair falls out freely on shaking it and on stooping.¹—The hair that was formerly soft became hard and brittle.¹—Large boils on various parts of the head.¹¹—Desquamation of the scalp thin and in large quantities, not preceded by itching, but accompanied by much perspiration.²—[30.] Itching of the scalp (sixth day).¹—Itching on the scalp obliges scratching, with fine desquamation of the skin, after which the itching ceases for a short time.¹—On the eighteenth day the itching on the head was slight, and only while perspiring.¹—Itching on the head, as from vermin, with increased falling of the hair.³—Incessant itching on the head, scratching relieves for only a short time; the desquamation of white dust-like scales and falling of the hair are very copious (twenty-third day).⁴—Biting itching, as from salt, on the head (twelfth day).⁴—Intolerable itching on the scalp, with a copious dustlike desquamation.²—Incessant itching of the scalp, increasing daily.³

Eye.—Glistening of the eyes, without clearness; slimy moisture is wiped from them.⁵—Copious secretion of mucus on the eyeballs.¹—[40.] Frequent secretion of tenacious slimy moisture in the eyes.⁴—Discharge of much purulent mucus from the eyes.¹—The mucus wiped from the eyes forms dry scales on the cloth.¹—The eyes become very dim, as if covered with a moisture.¹—The eyes become dim, injected, with profuse secretions.¹²—Aching of the eyes after bathing a little; disappears after continuing to bathe.¹¹—**Brow.** Falling of the eyebrows and lashes.¹—Falling of the lashes and eyebrows, with rapid secondary growth.¹²—Itching of the eyebrows.¹—**Lids.** Redness of the margins of the lids.¹²—[50.] Much mucus collects in the canthi, is frequently obliged to wipe them.²—Itching of the margins of the lids.¹²—**Ball.** Painfulness of the eyeball.¹²—Pressure deep in the eyeball.¹²—Increased tension in the eyeball.¹²—**Vision.** All things seem to move before the eyes when walking (seventh day); reeling, he staggers to and fro when walking (ninth day).³

Ear.—Copious secretion of soft earwax.⁴—Profuse secretion of earwax.¹²—More copious secretion of earwax several times a week, for several weeks.¹—The earwax feels slimy.¹—[60.] The earwax became thin, almost fluent.¹—Tickling sticking in the meatus auditorius.¹²—Much itching of the ear, disappearing after a copious secretion of wax.¹—Much itching of the ears, followed by discharge of thin pale-brown earwax.¹—Pains in the ears.³—Roaring in the ears, with diminished hearing.¹²

Nose.—Frequent sneezing, secretion of thick mucus.¹²—A watery secretion from the nose, ceases after a few days.¹²—Discharge of thin mucus from the nose.³—Thin watery discharge from the nose, tenacious, like a solution of isinglass.¹—[70.] Frequent discharge of yellow mucus from the nose for four months.¹¹—Increased discharge from the nose.³—Almost constant discharge from the nose.⁴—Thin liquid mucus flows from the nose.⁵—The nasal mucus forms a pellicle on the handkerchief, and when dry scales off like starch.⁴—A dry coryza gradually loosens.¹²—Nosebleed for six weeks, with which the weakness of vision bordering on blindness disappeared.¹¹—Inclination to nosebleed.¹²—Frequent itching in the nostrils.²

Face.—The expression is very suffering.⁴—[80.] Face sunken, emaciated.⁵—Redness and heat of the face.³—Face very red, as if heated, with

itching,⁶.—High color of the face after the first bath, at times with circumscribed redness of the cheeks,¹².—Blood rushes violently to the face,².—Sensation as though a cobweb were lying on the skin of the left cheek, which appeared frequently for several days,¹.

Mouth.—**Teeth.** The teeth seem too long,¹².—Drawing tearing in the teeth, so that he could scarcely eat,¹².—Tearing pain in the teeth,¹.—**Gums.** The gum becomes scorbutic after long bathing,¹².—[90.] Blisters on the gum,¹².—Gum loosened and painful, feeling sore while eating,¹.—Gums sensitive,¹².—**Tongue.** Tongue fuzzy, with nauseous, insipid taste,².—Tongue white on the edges, brown in the middle, with aversion to water,².—Tongue white, with brown fur in the middle,¹.—Margin of the tongue white, the middle brown, with insipid taste,¹.—Tongue coated brown,⁴.—Brown coating on the tongue, disappearing after drinking coffee,¹.—Injected veins under the tongue,¹².—**General Mouth.** [100.] Dryness of the mouth,².—The skin forms folds on the inner side of the mouth, lips, and cheeks, after which it peels off,².—Tickling in the posterior portion of the palate,¹².—**Taste.** Taste and appetite good, but without real hunger and thirst,¹.—Very bad taste in the morning,².

Throat.—Inclination to clear the throat,¹².—Swollen cervical glands,¹².—Swelling of the glands of the neck and behind the ears,¹.—(The previously very large cervical glands become smaller and disappear almost entirely),¹¹.—(The swollen cervical glands remain indurated),¹¹.—[110.] The cervical glands become sensitive,¹¹.—The parotid glands become sensitive,¹¹.

Stomach.—**Appetite and Thirst.** Great appetite daily (after four days),².—Appetite increased (after the first bath),¹¹.—Appetite at first increased, afterwards diminished,¹².—Great desire for food,¹.—Loss of appetite,⁸.—(Loss of appetite disappears after a few days),¹¹.—Aversion to food,².—Great thirst,⁸.—[120.] Longing for drink, but not thirst, not relieved by drinking ordinary water, but by Seltzer water, recurring daily for several days, and very distressing,².—Constant longing for refreshing drinks daily, from early in the morning through the day,¹.—Great thirst, with chilliness, at night,⁶.—**Eruptions.** Eructations, with colic,⁶.—Tasteless eructations,².—Eructations always after drinking the water,².—Distressing eructations,¹².—**Nausea and Vomiting.** Qualmishness (after half an hour),⁶.—Qualmishness and eructations continue only while drinking the water,².—She becomes qualmish and shudders, without vomiting,².—[130.] Qualmishness always after drinking the waters,¹.—Inclination to vomit, with a sensation in the abdomen as after a purge,¹.—Inclination to vomiting and to stool, immediately after the first swallow of the water, but only after some hours there follows a thin liquid slimy evacuation, with lumps, with great rumbling in the abdomen,¹.—Aversion and inclination to vomit, even while drinking, but if during the nausea quite fresh spring water is taken, the qualmishness changes for the moment to an inclination for a watery stool,³.—Vomiting,⁸.—**Stomach.** Promotes digestion,².—Pressure in the stomach,².—Pressure in the stomach, with a feeling of fullness and perceptible swelling of the epigastric region,².—Violent pressure in the stomach, lasting the whole day,².

Abdomen.—(Inflammation of the liver),⁸.—[140.] Violent pain in the region of the spleen,².—Emission of very much flatus,².—Emission of flatus, preceded by much rumbling in the abdomen,¹.—Emission of flatus, preceded by fermentation in the abdomen,².—Offensive flatus, as of rotten eggs,².—Profuse emission of flatus, without stool,⁴.—Profuse emission of flatus, without urging to stool,³.—Discharge of flatus and urine, without

urging to stool,¹.—Emission of flatus difficult and seldom,².—Rumbling, with diarrhœa,².—[150.] Great desire and rumbling in the abdomen, with a stool slimy and watery, mixed with hard lumps,⁴.—Fermentation in the abdomen increases after drinking the water, not followed by stool,⁴.—Constant fermentation in the abdomen,¹.—Heaviness in the abdomen,¹².—Colic, without subsequent stool,².—Violent colic,².—Pains like a cutting in the abdomen and small of the back, with profuse menses; the colic is less on the third day,².—Dragging from the abdomen half way down the right thigh, at the point where a femoral hernia had protruded, with a sensation as if the hernia would protrude, lasting several days and very distressing,¹.—Very transient, frequently repeated sensation as though diarrhœa would result, which, however, follows only after two hours, and after drinking coffee (first day),¹.—Swelling of the right inguinal region, with a sensation of an inguinal hernia,³.

Rectum and Anus.—[160.] Hæmorrhage from the rectum,¹².—Hæmorrhoidal flow (curative of abdominal plethora),¹¹.—Burning in the rectum and bowels,¹².—Ineffectual desire for stool,³.—Constant desire for stool, with daily evacuation,¹.—While urinating very frequent desire for stool, the evacuation could scarcely be retained,³.—Urging to stool, without an evacuation,⁶.

Stool.—Diarrhœa. Diarrhœa early in the morning and after drinking the water,¹.—Diarrhœa, with scanty evacuations,².—Copious slimy diarrhœa,¹.—[170.] Purging, with relaxed urinary organs and intestines,⁴.—Diarrhœalike stools almost daily,⁴.—Diarrhœalike stool, with much colic,².—Violent sensation of diarrhœa, with a thin liquid, slimy stool, mixed with lumps, and great exhaustion, repeated in the evening,¹.—Copious evacuation, with rumbling in the abdomen,¹.—Evacuation very copious, thin, and pasty,¹.—Involuntary evacuations of thin, slimy stools when urinating, with much fermentation in the abdomen, which is increased by drinking the water,¹.—Thin pasty stools several times a day,¹.—Copious evacuations from drinking the waters,³.—Stools increased (only after first eight glasses),¹.—[180.] Thin stools,¹.—Stools thin, pasty, with qualmishness,¹.—Frequent scanty, watery evacuations during copious emission of flatus,¹.—On emitting flatus, involuntary escape of a thin liquid stool,¹.—Evacuations glutinous,³.—The evacuations seem like solutions of isinglass,¹.—Stools green,¹¹.—Stool black,¹¹.—Stools gray, slimy,¹¹.—Stool brown,¹¹.—[190.] The stool smelt like rotten eggs,¹.—Stool of a penetrating, specific odor,¹¹.—Stool at times mixed with blood,¹¹.—A stool follows, without great previous desire, in a small quantity and only after breakfast, when there is desire for stool, which is frequently repeated all day; the evacuation is of a light color, slimy, liquid, with much rumbling,⁵.—White slimy stools,⁴.—Slimy stool early in the morning,¹.—Tenacious mucus in the stool, forming bloody membranes,³.—Frequent dark, bilious, slimy stools,¹².—The linen is stained a dirty white by the stool, when dry it scales off like starch,¹.—Stools thready,¹¹.—[200.] Stool insignificant,².—The stools become more seldom as soon as the activity of the skin is increased,¹¹.—Stools more seldom, with frequent micturition,¹¹.—**Constipation.** Constipation,⁸.—Constipation, alternating with frequent desire for stool,¹².—Retention of the stool, with pressure,².—No stool during the menses, without lavements,².—Retention of stool,¹; (first days),⁴.—Stool hard (sixth day),².—Discharge of hard masses, with great desire for stool,⁵.—[210.] Stool hard, nodular, after lavement, during profuse menstrual flow,².—Evacuation tubular, seeming to consist of hardened membranous bile,¹¹.—The evacuations of the

bowels become more infrequent and inversely, as the function of the skin is increased,¹¹.

Urinary Organs.—(Inflammation of the kidneys),⁸.—Pressure in the region of the kidneys,¹².—Obliged to rise at night to urinate,¹.—Obliged to rise to urinate several times at night,⁵.—Is obliged to urinate more frequently after coffee, the urine is more profuse,⁴.—Very frequent micturition in a tolerable quantity, with constant perspiration and scanty stools,³.—The urine flows in a weak stream, with little power and slowly, with a thin liquid stool,¹.—[220.] Frequent micturition of pale yellow urine, with diarrhoea,¹.—Micturition in several spurts, slow and with a weak stream, with great desire for stool, but scanty discharge,¹.—(A copious and frequent micturition is diminished),³.—(Micturition, which hitherto had been frequent, became more infrequent and copious),¹.—Micturition seldom after milk,¹.—Micturition scanty, with constant perspiration,⁴.—Micturition seldom, with scanty stools,².—Copious secretion of urine, which finally becomes dark, acid, deposits a greenish-yellow sediment,¹².—The urine has a peculiar odor,¹.—The acid urine had become alkaline,¹².—[230.] The urine is clear, light yellow, and fatty,³.—Sediment in the urine, with “hæmorrhoids of the bladder,”⁶.—Deposit from the urine on the walls and bottom of the vessel,⁵.—Urine slimy and fatty,¹.—The urine makes the linen stiff like starch,⁴.

Sexual Organs.—**Male.** Genitals turgid, excited,¹².—Intolerable itching on the genitals, obliging him to scratch,⁶.—Distressing itching on the genitals every day,¹.—Emissions,¹².—**Female.** (A woman married for several years became pregnant for the first time),⁹.—[240.] (Miscarriage, that had taken place several times, was avoided),¹⁰.—Oozing of slimy moisture from the vagina,⁶.—Menses profuse, like a uterine hæmorrhage, continuing for several days, then became scanty, but lasted fourteen days before they entirely disappeared,².—The menses return with great violence after an intermission of several months,⁷.—The menses usually late become earlier and more profuse, and without previous symptoms,⁷.—The scanty menses are increased,⁶.—Menstruation copious, even returns after the climacteric period,¹².—The menstrual flow that had long been absent returned on the sixteenth day, after drinking the water, with whirling in the head, trembling, faintness, colic, alternations of chill, heat and sweat, with thirst, cramp in the thighs, calves, and feet, with cramplike hiccough; the menses were very profuse,².—The menstrual blood seems like mucus,².—Menstrual flow slimy, dark-colored, not watery,⁶.

Respiratory Organs.—**Cough and Expectoration.** [250.] Loose cough, in the morning,¹².—Expectoration of lumps of mucus,¹².—Expectoration of firm mucus,¹.—Expectoration of mucus without cough. The expectoration increases from day to day, is not frothy, but consists of thin tenacious mucus,¹.—The expectoration has a sweetish taste, always occurs after drinking the water, very seldom at other times,¹.—Profuse, glutinous, salt expectoration,¹¹.—Profuse secretion from the mucous membrane of the bronchii,¹².—**Respiration.** Respiration in the bath at first accelerated, gradually became slow, after a bath deep, gradually increasing in number by 3 to 5 to the minute,¹².—Short breath when walking slowly upon a level,¹.—Very short breath on ascending a hill, is obliged to walk very slowly, and to stop frequently in order to get his breath,⁵.—[260.] Oppression of the breath, constriction of the chest in the region of the diaphragm as soon as this region is bathed; obliged him to raise the chest out of the

water, and always returned whenever the water reached the region of the diaphragm.⁴

Chest.—Slight angina pectoris,¹².—Oppression of the chest,¹¹.—Oppression of the chest as soon as he goes into the bath, soon becomes very violent and threatens suffocation, and always obliged him to raise the chest out of the water whenever he is covered with the water,¹.—The chest seems constricted by the clothes, which are not tight; he breathes more freely when the clothes are opened,¹.—Pressure upon the chest,¹¹.

Heart and Pulse.—She becomes very weak about the heart,⁵.—Beat of the heart accelerated, violent,¹².—Palpitation,⁷.—The pulse, on going into the bath slow, became irregular (after three to six minutes), gradually became hard and small; accelerated (after half an hour); soft, constantly 100, with remissions, in the morning (after bathing several weeks),¹².—[270.] Makes the pulse slower,¹¹.

Neck.—Tension and stiffness in the nape of the neck,¹².—Drawing in the nape of the neck,¹².

Extremities.—Trembling of the limbs, with weakness,².—Very rapid growth of the nails,^{3 12}.—Lightness of the limbs, with desire to move (fifteenth day),³.—Limbs so heavy that they could scarcely support her,².—Extreme indolence in all the limbs (fourth day); all the limbs feel bruised,¹.—The indolence and heaviness of the limbs diminishes (after nine days),¹.—Upper and lower extremities so weary and exhausted that he seldom moves them, with a weeping mood,¹.

Superior Extremities.—[280.] Trembling of the hands,¹.

Inferior Extremities.—Great weariness of the lower extremities, with pain in the toes,⁶.—Cramp in the thighs,².—Rheumatic pain in the right thigh for several days, especially on walking,¹.—Constant painful sensation in the bone of the right thigh, as though a hernia would protrude,¹.—Swelling of the feet,¹.—The swollen feet become sensitive,².—The feet became painful and sensitive,¹².—The feet are sensitive early in the morning, as after a long walk,².—Burning like fire in the feet,².—[290.] The corns drop off,¹².—The corns become elevated and soft, and are easily taken off,⁵.—The corns between the toes easily taken off after the skin has become soft,⁶.

Generalities.—The water used for washing is changed to a yellow color,².—After bathing the body smells of rotten eggs,¹.—Great ease of motion,⁷.—Is able to walk for hours without weariness (twelfth day),¹.—He feels so strong and active that he can climb the highest mountain, and is able to walk for several hours in the great heat of the sun (after fifteen days),¹.—A feeling of comfort, with very profuse, soaking perspiration, without stretching,¹.—(Less weakness), (twelfth day),⁴.—[300.] (No exhaustion), (thirteenth day),⁶.—Great weakness during the menses,⁷.—Great weakness and weariness after a long walk, with need of rest,¹².—Feeling of great weakness, with a slight perspiration,¹.—Feels very sick, inclined to lie down, but does not,².—Very easily fatigued by a short walk,¹.—Loss of strength, with dulness of the head, after moderate talking,³.—Great weariness,⁵.—Great weariness after a long walk,².—No desire to walk, only to ride,¹.—[310.] Obligated to lie down in the forenoon and afternoon, on account of weariness,¹.—Great exhaustion,¹¹.—Very much exhausted from early in the morning through the day, so that he walks very slowly,¹.—Great prostration and inclination to sleep,⁶.—Uneasiness and sleeplessness,².—Anxious restlessness, sleeplessness, itching and formication over the whole body,².—Anxious uneasiness as soon as she gets into bed, on account of

which she cannot sleep.²—(Faintness),⁸.—Very great faintness.²—Rheumatism reappeared though it had been dormant for many months.¹¹.—[320.] Rheumatic affections are produced in people who never before suffered from rheumatism.¹¹.—Both from drinking and bathing the body becomes much inclined to take cold, and one suffers frequently from rheumatic pains in the head, teeth, and other parts; warm clothing and drinking very warm spring water frequently removes the trouble, sometimes warm baths have been used.³.—The aversion to the water becomes so great in many people as to cause cramplike sensations as soon as they come near the bath, which afterwards disappear.⁴.—The whole body feels bruised.⁴.—Tension of the muscles, or here and there tearing pains.¹².

Skin.—Objective. In the bath the skin became thick, parchment-like, as if swollen, after awhile rough like sand between the fingers, feeling wrinkled.¹².—(The skin, hitherto like parchment, becomes soft and perspiring).¹¹.—Swelling of the skin on the hands and feet.⁴.—Swelling of the hands and fingers diminishes after a copious perspiration, and gradually disappears (after six days).¹.—Swelling of the skin on the feet diminishes after a moderate perspiration, and even desquamates.¹.—[330.] The skin is very hard and dry (first day).¹.—Cracks in the hardened skin of the soles and heels, the skin comes off in large thick pieces.⁴.—Free desquamation of the epidermis.⁴.—Dustlike desquamation of the skin of all parts of the body on rubbing.³.—On scratching the skin desquamates in large quantities.⁵.—Desquamation first on the feet and back, gradually over the whole body, especially on the scalp.¹².—When wiping the perspiration from the face the skin rubs off easily.¹.—The skin about the neck desquamates freely during the free perspiration.¹.—The skin on the back desquamates in large flakes during the perspiration.¹.—Profuse desquamation in the epigastric region.².—[340.] Desquamation of the skin of the hands and fingers, preceded by pustules.⁴.—Mealy desquamation of the hands.¹.—The skin about the finger-nails desquamates.^{1 2}.—Desquamation of the skin of the feet is repeated several times during three months.¹.—The hard skin on the balls of the feet, heels, and toes becomes soft, and comes off in large pieces.¹.—(Erysipelas).⁸.—(Redness of various parts of the skin, with relief of the distressing hypochondriac, hysterical, or rheumatic troubles).¹¹.—Violent roseola-like inflammation of the skin, with an eruption.¹¹.—The skin becomes pale, shading to yellow.¹².—Yellow spots on the forehead and chest, at first small, dark.¹².—[350.] Many yellow spots on the cheeks, forehead, and nose; those on the cheeks become larger, paler, and disappear (after three weeks).².—The yellow spots on the upper lip become larger, but paler, small pustules appear, which rupture, after which the skin desquamates.².—(The yellow spots on the abdomen which had been noticed for several months, became larger, but paler), (after nine days).².—Brown spots on the abdomen, which itch on sweating.¹.—Rash (after a bath).¹¹.—Nettlerash eruption.¹².—Pimples, vesicles, boils, mostly on the back.¹².—Exanthematous eruptions.¹².—Eruption of many red elevated points on the skin, half a line in size, especially in fat persons, succeeding frequent and too warm baths in the hot summer; in fat and profusely sweating persons more frequently than in the lean.¹¹.—Itching and eruption on the skin.⁸.—[360.] Tetter-like eruption, with violent itching of the skin of both forearms.¹¹.—(Vesicular eruption in the epigastric region, with cure of hypochondriac anxiety).¹¹.—Moist tetter appears on the hands of a hypochondriac (curative action).¹¹.—(Pocklike eruption extending over the whole body, with cure of the rheumatic pains).¹¹.—Eruption of pus-

tules in various parts of the body, chest, arms, etc., they open, but discharge nothing, after which a large portion of the skin desquamates, while on other parts of the body the desquamation is fine.¹—Small pustules on the hands, which burst without discharging liquid, followed by desquamation of the skin.³—Small furuncles.¹²—(A large quantity of furuncles and suppurations, followed by relief of the rheumatic troubles).¹¹—Very painful abscesses develop towards the surface, from deep in the flesh, with long-continued suppuration.¹¹—Inclination to *pararitia*.¹²—[370.] The functions of the skin and intestinal canal become active, at times isolated parts only are not affected after bathing.¹—**Subjective.** Uneasiness and feeling of formication of the skin over the whole body.¹—Crawling, formication, and itching.¹²—Single stitches like flea-bites in the skin in various parts of the body, after which hives as large as a quarter of a dollar appear, with burning itching.³—Stitches here and there, as from fine needles, in the skin.¹²—Prickling of the skin while in the bath.¹—Prickling in the skin over the whole surface of the body.¹¹—Burning sensation in the skin at times.¹²—Itching of the skin.¹¹—Violent itching, even before the outbreak of perspiration.¹—[380.] Itching only when the skin is dry, and the feeling of heat has passed off.¹—Biting itching as from salt, perspiration over the chest, and itching over the whole body, the perspiration continues while walking in the hot sun at noon for two hours, without being distressing, it also continues after changing the clothes and drying the skin: therewith the previous short breath, even on walking, slowly disappeared, and he was able to climb a hill easily and to run about.¹—Itching on the cartilages of the ear.¹—Itching and burning in the concha.¹²—Intolerable itching on the back, obliging scratching.³—Violent biting itching on the back previous to the outbreak of moderate perspiration.¹—Diminution of the itching on the back, even with profuse perspiration.¹

Sleep.—Causes sleepiness.¹¹—Sleepiness after a bath.³—After a bath sleepiness that could scarcely be repressed: the sleep refreshes him, though he is ill-humored all day.¹¹—[390.] Sleepiness disappears after continuing to use the water.³—Desire to lie down, and great sleepiness during the day; at night sleeplessness, though he had lain down little during the day.¹—Great sleepiness from 7 A.M. on.⁵—Sleep very good (first day); with many dreams (fourteenth day); little sleep at night after a long walk, though he was very weary and not restless (seventeenth day).¹—Has no desire to rise in the morning on account of sleepiness.¹—She lies down much through the day, with naps.²—Weary, with sleep, in the morning and through the day.¹—Sleep sound but not refreshing, afterwards dreamy.¹²—Little sleep at night on account of dry heat.⁵—Falls asleep late, and immediately dreams.¹—[400.] Wakefulness on going to bed.¹—Frequent waking from a dreamy sleep.⁵—Restless sleep.¹—**Dreams.** Sleep interrupted by dreams.¹—Sleep full of dreams.²—Dreams disturb the sleep, immediately after falling asleep.³

Fever.—Chilliness. Inclined to be chilly from the slightest air on the clothes or under the bedcovers.¹—Chilliness, immediately on raising the bedcovers.¹—Chilliness occurs very easily, while dressing after a bath.⁵—Shivering chill, immediately on raising the bedcovers, with slowly returning warmth.¹—[410.] Alternations of chill and heat, but more heat with perspiration and thirst than chill.²—Alternation of shivering chill and frequent heat.³—**Heat.** Causes fever.⁵—Orgasm of blood disturbs sleep.²—Dry heat disturbs sleep at night.²—General heat of the body with

a hard stool,⁶.—Sensation of burning heat over the whole body,².—Constant sensation of heat, with qualmishness,⁶.—Anxious heat all day, does not know what to do on account of it,².—Oppressive sensation of heat of the skin, with moderate perspiration,⁶.—[420.] Sensation of very great heat of the skin, without much sweat, all day,⁴.—Increased warmth of the skin, with a sensation of great heat and longing for drink,¹.—Sensation of internal warmth in the flesh of the extremities, especially of the joints,¹².—Temperature of the body in the bath at first fell, gradually rose above the normal, though with decided oscillations, suddenly fell after a bath, then rose higher than in the bath,¹².—Burning heat of the hands,².—**Sweat.** Profuse perspiration and urine, day and night,².—Very copious perspiration on a long walk, with incessant itching of the skin,⁶.—Skin at times dry, at other times moist, even a profuse perspiration,¹².—Constant slight perspiration,³.—Moderate perspiration, with biting like salt, and itching over the whole body,¹.—[430.] Clammy itching perspiration,¹.—Slight perspiration with a moderate stool,⁶.—Skin constantly moist,¹.—Perspiration on the head,¹².—Perspiration trickles from the head, without itching,^{1, 3}.—He perspired very easily on the scalp, even when walking slowly,¹.—Perspiration on the scalp, with violent itching,⁴.—Much perspiration on the neck, with disappearance of the yellow spots,².—Profuse perspiration on the face, which itches and compels rubbing,¹.—Perspiration on the palms and soles,¹².—[440.] Copious perspiration on the hands, with wrinkling of the skin and desquamation, as in washerwomen,¹.—Strong odor to the perspiration on the feet,³.—(The perspiration on the diseased parts colors the linen brown),¹¹.

WILDBAD.

The springs at Wildbad in Württemberg.

Analysis (Fehling) of 16 ounces.

	Drinking Spring.	Catharine Spring.
Carbonate of lime,	0.73834 grains.	0.75110 grains.
“ magnesin,	0.07918 “	0.07928 “
“ soda,	0.83773 “	0.73774 “
“ iron,	0.00281 “	0.00292 “
Manganum,	Traces.	Traces.
Alumina,	0.00422 “	0.00453 “
Sulphate of soda,	0.29199 “	0.31879 “
“ potash,	0.10859 “	0.10767 “
Chloride of sodium,	1.80810 “	1.89650 “
Silicic acid,	0.48015 “	0.47662 “
	<hr/> 4.35114 “	<hr/> 4.37515 “
Free carbonic acid,	0.97236 “	0.86884 “
Temperature,	27.6° R.	31.6° R.

Authorities. 1, Hartlaub, A. H. Z., 84, 147, a prover in tolerably good health, except rheumatism in the left arm, urine rather dark and somewhat scanty, took the bath and drank the water; (2 to 5, Dr. Kallenbach, Vjs. für Hom., 12, 194, effects on different people, from bathing and drinking); 2, Dr. Fallati; 3, Welter; 4, Rietz; 5, Dr. Kallenbach.

Mind.—Depressed mood,¹.—Mood extremely depressed, with great anxiety (after six days),¹.—Mood very depressed and sad,¹.—Memory unusually weak,¹.

Head.—Rush of blood to the head,¹.—Dulness of the head,¹.—Great heaviness of the head, especially of the occiput, at night; aggravated by external pressure,⁵.—Head heavy, with a pressure from within outward, on waking,³.—Feeling as though the whole brain were overfilled, intolerable when the head lies upon a pillow,⁵.—[10.] Throbbing headache, on waking at night,⁴.—**Forehead.** Tearing pains in the forehead, extending from the middle of the right eyebrow,¹.—**Vertex and Occiput.** Violent pulsation on the vertex and occiput,⁵.—Heaviness in the vertex on waking at night, as if a weight were lying upon it,⁴.—Pressing-tearing pains in the middle of the top of the head,¹.—Sudden throbbing on the vertex and occiput,⁴.—Sensitiveness with slight throbbing in the vertex and occiput,⁵.—Throbbing in the occiput,³.—Pulsation in the occiput, at night,⁵.—Pulsation and warmth in the occiput, aggravated by lying down in bed, in the evening; was obliged to sit partly erect, with sleeplessness, till midnight,⁵.—[20.] Pulsation in the occiput; only possible to sleep in a half sitting position,⁵.—**External Head.** The hair usually oily lost its oily nature entirely after a few baths; the hair of the beard grew out darker than natural,¹.—Moving the scalp was difficult, as though the frontal muscles were too short,⁵.

Eye.—Pain in the eyes on writing, in the evening,¹.—Pressure in the eyes on writing in the evening,¹.—Pressing pain in the eyes on writing,¹.—Fine sticking pains in the eyes, especially in the left, rather more about the eyes, in the eyebrows, below the eyes, also in the eyeballs, without affecting vision,¹.—Acute pain in the left upper eyebrow, at the exit of the supraorbital nerve, something between a drawing, twitching, and sticking; the spot remained sensitive for some time,¹.—Acute pain in the right supraorbital foramen,¹.—Pain in the left supraorbital foramen, and also above the right eye,¹.—[30.] Some agglutination of the lids, in the morning,¹.—Fine stitch in the margin of the lower lid, not far from the outer canthus,¹.—Violent itching in the inner canthus, with sore pain when rubbed,¹.—Itching of the right outer canthus, in the evening while writing,¹.

Ear.—Sensation in the ears as after taking cold, first right, then left,¹.—Sensation of warmth in the right ear,¹.—Stitch in the right ear,¹.—Pressing stitch in the left ear, as if deep in the meatus,¹.

Nose.—Blood from the right nostril, in the morning,¹.

Face.—Violent painless twitching in the face,¹.—[40.] Pain in the left articulation of the jaw, and in the lower jaw, and on the top of the shoulder,¹.

Mouth.—Teeth, especially of the right side, painful, as if too long, or as after taking cold,¹.—Dryness of the mouth, without thirst, and with coated tongue, in the morning,¹.—Mouth and tongue dry, towards morning,¹.—Burning point in the right corner of the mouth or wing of the nose,¹.—Bloody saliva, apparently from the fauces, after talking, in the open air,¹.

Throat.—Expectoration of mucus from the throat and larynx, and of mucus coming from the nares into the fauces,¹.—A retching, spasmodic, or drawing pain in the œsophagus, above the stomach, with some nausea,¹.

Stomach.—Ravenous hunger,¹,³.—Great hunger, as from an empty stomach, in the morning, and also in the evening, soon after supper,¹.—[50.] Sensation of hunger, gnawing emptiness in the stomach and whole abdomen,¹.—Eruptions,¹.—Empty eruptions,³.—Some nausea, on waking in the morning (fourteenth day),¹.—Sensation of indigestion in the

stomach,¹.—Feeling of emptiness in the stomach, without great hunger,¹.—Sensation of great emptiness, like a disordered stomach, with eructations,¹.—Pains in the stomach,¹.—Pressure in the stomach,¹.

Abdomen.—Colic in the umbilical region, as before a stool, without an evacuation,¹.—[60.] Sticking drawing pains in both hypochondria,¹.

Rectum and Anus.—Spasmodic pressure in the anus and perineum,¹.—Great urging to stool, which was dark and thin; afterwards brown, with mucus, and at 11 A.M., a third, very watery, yellowish gray, with some colic,¹.

Stool.—Stool at first restricted,¹.—Stool brown and thin (later action),¹.—Stool dark, accompanied with much tenacious mucus,¹.—Evacuation on the third day rather hard, lumpy, covered with mucus, of a dark blackish-brown color,¹.—Stool in small masses like sheep-dung,¹.—Stool at first constipated, after a few days copious and natural, dark brown, accompanied with some colic,¹.—Stool hard, lumpy, unsatisfactory, dark-colored, with pressure,¹.—[70.] The stool became again retained and dark brown (thirteenth day),¹.

Urinary Organs.—Frequent urgent desire to urinate,¹.—Mucus in the urine, with large crystals of uric acid (after ten days),¹.

Sexual Organs.—Painful erections on waking,².—Erections more easy than natural,¹.—Painful drawing in the spermatic cords, on waking, after an emission,⁵.—Menstruation is usually hastened,¹.

Respiratory Organs.—Dry cough,¹.—Oppressed respiration,¹.—Oppressed respiration on ascending stairs,¹.

Chest.—[80.] Pain and cracking in the upper part of the sternum, at the point of union with the first right rib,¹.

Neck and Back.—Tearing pain, as if sprained, transversely through the nape of the neck,¹.—Constant pulsation in the nape of the neck and occiput, at night,⁵.—Drawing in the back as though a hot sponge were drawn along the skin, on waking in the morning,⁴.—Prickling on the back followed by nettlerash,⁴.—Disagreeable sensation of warmth along the lumbar vertebrae,⁵.

Extremities.—Weakness in the joints, so that it was very difficult to ascend steps or a mountain,².—Feeling of fulness and heaviness in the limbs,¹.—Pain, here and there, in the limbs,¹.—Constant drawing pains, here and there, in the limbs, for example, in the morning, in the right forearm, in the muscles between the elbow and thumb, which were also painful to pressure, soon afterwards in the left upper arm, below the shoulder,¹.

Superior Extremities.—[90.] Violent drawing-tearing pain about the right shoulder,¹.—Shuddering jerking in the right upper arm,¹.—(Pain in the left arm, as if in the bone of the upper arm, on motion),¹.—Drawing pain in the left upper arm and in the right thigh,¹.—Acute drawing pain in the left upper arm,¹.—Acute pain in the left arm above the elbow, towards the outer portion, as if in the bone or tendon, as if sprained,¹.—Transient drawing and burning beneath the right elbow, in the bone,¹.—Rheumatic pain of the forearm, from the dorsal surface of the wrist to the elbow, near the wrist the arm was painful,¹.—The finger-nails became very soft, could no longer open a watch with them,¹.—Hangnails on the right middle finger,¹.—[100.] Stiffness and painfulness of all the fingers on opening and closing the hand,¹.—Stiffness of the right little finger, as if in the bone, especially after writing a long time,¹.—Pain in the last phalanx of the thumb, as if ulcerated and swollen,¹.—Drawing aching in the first phalanges of the left index and middle fingers, as if in the bones,¹.—Pain

in the first phalanx of the left index finger, especially on the flexor surface and on the side towards the thumb, swollen with painful stiffness, transient, leaving a sensation of numbness, with painful tension in the middle joint on flexing it; afterwards a painful and swollen sensation in the first joint of the left thumb.¹

Inferior Extremities.—Weariness of the hips after a slight effort.¹—Pain in the right hip and nates.¹—Pain in the nates, right and left, as if in the sciatic nerve, especially on walking.¹—Pain in the right thigh, as if in the muscles, on the posterior and inner surfaces.¹—Drawing pain in the right thigh, a hand's breadth above the knee, between the anterior and outer portions.¹—[110.] Pain in the outer portion of the right thigh, somewhat below the hip.¹—Violent cracking in both knees on rising.¹—Cracking of the right knee.¹—Pain and stiffness in the right knee, as if contracted, on waking in the morning.¹—Distressing sensation of looseness in the knee-joints, it seems as though the bones of the joint did not fit together; walking was difficult, so that he was obliged to support himself with a stick.³—Rheumatic drawing in the right knee, with cracking on moving it.¹—Pain in the right calf, on walking.¹—Drawing in the ankles.³—Drawing-pressing pain in the sole of the left foot, behind the toes.¹—Sprained sensation in the first joint of the right great toe.¹—[120.] Pain as if sprained, in the first joint of the right great toe.¹—Pain as if sprained, in the right great toe.¹—Sprained sensation in the left great toe.¹—Acute pain in the left little toe.¹

Generalities.—Great weakness, weariness, and inclination to keep quiet.¹—Weariness.³—Great weariness through the day.³—Great weariness after walking.⁵—Great weariness, especially in the knees and ankles, so that he was frequently obliged to sit down.¹—Sudden weariness after a walk; standing was so difficult that he was obliged to sit down; the ankles seemed loosened and not firm; on ascending a hill it seemed as though the joints of the knees and ankles would separate; was obliged to support himself firmly upon a stick.³—[130.] Great inclination to lie down, especially on the back, and to stretch out, with a feeling of comfort and warmth through the whole body, and great aversion to business, especially after a bath.¹—Great inclination to stretch and to keep quiet, with a general comfortable warmth through the body.¹

Skin.—Crawling itching about the left half of the mouth, around the red of the lip, especially of the lower lip.¹—Itching on one finger of the right hand.¹—Itching of the right thumb, only in a small spot, as if in the periosteum; pressure and rubbing seemed to relieve but did not remove it entirely.¹—Violent itching on the knuckle of the left index finger, with development of a small vesicle.¹—Much itching on the middle knuckle of the left ring finger.¹—Itching on the right nates.¹—Violent itching on the left calf and on the tibia.¹—Violent itching of the left calf (after a bath).¹

Sleep.—[140.] Very sleepy, in the evening.¹—Unusual desire to sleep after eating.¹—Complete sleeplessness till 4 A.M., with constant uneasiness and excitement, with great burning heat without sweat, was frequently obliged to rise and throw off the bedcovers to get rid of a distressing sensation of heat; after sitting partly erect, with the head against a hard pillow, the restlessness passed off about 4 o'clock, followed by sleep with dreams till morning; very weary after waking.⁵—Sleep only after midnight, restless and full of dreams.⁵—Restless sleep.³—Night restless, full of confused dreams, with waking every fifteen or twenty minutes, with a

feeling as though he had slept several hours,⁵.—Sleep restless, with frequent waking, and a sensation as though he had slept several hours,⁵.—Night restless, with dreams,¹.—Sleep dreamy, with frequent waking,³.—Disagreeable, frightful dreams,¹.—[150.] Anxious dreams, at night,¹.—Violent weeping in a dream, waking in perspiration,¹.—Confused and anxious dreams, at night,¹.

Fever.—Hands quite cold, with weakness and perspiration on walking,¹.—Coldness of the feet (fourteenth day); (quarter of an hour after a bath),⁵.—Violent dry heat over the whole body,⁵.—Prickling heat over the whole body with some perspiration,⁵.—Very disagreeable heat in the occiput, becoming intolerable on lying down, and amounting to violent pulsation,⁵.—Increased inclination to sweat,¹.—Easy perspiration,¹.—[160.] Perspiration at night,¹.—Free perspiration at night and during the day, after every exertion,¹.

Conditions.—**Aggravation.**—(*Night*), Heaviness of head; on waking, throbbing headache; heaviness in vertex; pulsation in occiput.—(*Pressure*), Heaviness of head.—(*Lying in bed*), Pulsation and warmth in occiput.

WYETHIA.

Wyethia helenioides, Nutt. (*Alarconia helenoides*, D. C.; *Melarrhiza inuloides*, Kellogg.)

Natural order, Compositæ.

Preparation, Tincture of the root.

Authority. J. M. Selfridge, M.D., copied from original manuscript; the symptoms were observed by seven men and two women; the green root in substance or the mother tincture was used by each prover; when the tincture was taken, the dose varied from 5 to 40 drops; the taste of the root is herbaceous, aromatic, and slightly bitter, leaving a sweetish sensation in the mouth; no symptoms were manifested for some minutes after chewing the root or swallowing the tincture.

Head.—Dizziness.—Rush of blood to the head.—Severe headache.—Pain in the forehead over the right eye, at first sharp, followed by a feeling of fullness.

Ear.—Itching in the right ear.

Mouth.—Mouth feels as if it had been scalded.—Increased flow of toughropy saliva.

Throat.—**Throat feels swollen; epiglottis dry, and has a burning sensation; constant desire to swallow saliva to relieve the dryness, yet affording no comfort; swallows with difficulty.*—**Pricking dry sensation in posterior nares; sensation as if something were in the nasal passages; an effort to clear them through the throat affords no relief.*—[10.] The uvula feels elongated.—**Dryness of the fauces; constant desire to clear the throat by hemming.*—Sensation of heat down the œsophagus, into the stomach, worse while eating.

Stomach.—Belching of wind, alternating with hiccough.—Nausea and vomiting.—Sense of weight in the stomach, as if something indigestible had been eaten.

Abdomen.—Pain and bearing down in the right side.

Anus.—Itching of the anus.

Stool.—Passages loose, diarrhœic, of a dark-brown color, came on in the night, and lasted five days.—Passages small, dark brown; look burned.—[20.] Passages previously light-colored, irregular, and constipated, be-

came dark-colored, regular, and soft.—Great constipation, accompanied with hæmorrhoids, not bleeding; never had them before or since (three probers).

Sexual Organs.—Pain in the left ovary, shooting down to the knee.—Leucorrhœa.—Menses appear for the first time in over a year, since birth of last child; color purple and scanty, with great pain.

Respiratory Organs.—Burning sensation in the bronchial tubes.—Dry hacking cough, caused by tickling in the epiglottis.

Chest.—Sharp pain just below the ribs on the right side, deep-seated, followed by soreness.

Pulse.—Slowness of the pulse, decreased in ten hours from 72 to 58 per minute.

Superior Extremities.—Pain in the right arm, with stiffness of the wrist and hand.

Generalities.—[30.] Feels weak and nervous, uneasy; is apprehensive that some calamity is about to occur.—Feels very weak, as a person feels after a severe illness.—Unable to make much exertion; the least exercise causes perspiration.—All the symptoms worse in the afternoon.

Fever.—Cold sweat over the whole body, which soon dries off, and again comes and goes as if by flashes.

XANTHOXYLUM.

Xanthoxylum Americanum, Mill.

Natural order, Rutacæ.

Common name, Prickly ash.

Preparation, Tincture of the bark.

Authorities (Charles Cullis, M.D., Pub. Mass. Hom. Soc., vol. ii, 1861–6, p. 267.) **1**, Mr. S., aged twenty-nine years, took 4 drops tincture at 10 P.M. (first day), 10 drops in the morning (second day), 12 drops at 8 P.M. (fourth day), 20 drops at 3 P.M. (sixth day); **2**, same, seven weeks later, took 25 drops at 8 P.M.; **3**, Mr. A., aged twenty-seven years, took 3 drops at bedtime (first day), same in the morning (second day), 5 drops at 6.30 A.M., and 12 drops at 8.30 P.M. (third day); **4**, a prover, aged thirty-three years, took 2 drops; **5**, Miss D., aged twenty-six years, took 12 drops; **6**, Mrs. H., aged thirty years, took 10 drops at 9.20 P.M. (first day), 20 drops in the evening (second day); **7**, Mrs. J., aged twenty-eight years, took 20 drops at 8 P.M. (first day), same at 11 A.M., 22 drops at 2 P.M., 25 drops at 3 P.M., and 20 drops at 8 P.M. (second day.)

Mind.—A feeling of depression and weakness (soon),⁶.—Great depression (second day),³.—Terrible, nervous, frightened feeling (five minutes after fourth dose),¹.—Indifference and malaise (second day),⁴.

Head.—Head dull and aching (two hours after second dose, third day),³.—Headache, with sleepy feeling, in the morning (third day),³.—**Head feels full* (five minutes after fourth dose),¹.—Pressure in the head, with fulness of the veins (in five minutes),⁵.—Shaking the head produces a feeling of looseness or quivering of the brain, followed by dizziness (first day),⁴.—[10.] Tightness of the head, with pain increasing over the eyes (five minutes after fourth dose),¹.—A tightening of the scalp, and heavy pains in temples (twenty minutes after first dose); same feeling (after second and third dose); increase of head difficulties, with a great heat and quiet flowing (menstrual), being two days in advance of proper time (after fourth dose); some headache (after fifth dose),¹.—Throbbing headache

(three-quarters of an hour after third dose),¹.—Frontal headache (after five minutes),².—Diffused pain in the upper part of the forehead; worse in the right side; pain extends to the base of the brain, with soreness (first day),⁴.—Severe frontal headache, with dizziness (five minutes after fourth dose),¹.—A dull headache, in space not larger than half a dollar, over the nose (five minutes after second dose),¹.—Throbbing headache over right eye with nausea (half an hour after third dose),¹.—Darting pain in left temple, recurring again and again (fifteen minutes after second dose, third day),³.—About the upper part of the cranium, an achy feeling accompanied by flashes of throblike pain, as if the top of the head were about to be taken off (fifteen minutes after second dose, third day),³.—[20.] Heavy feeling in the top of the head (in one hour),⁵.—Pain in left side of head and left elbow (in one hour),⁵.—Pain in the back of the head, also a bewildered sensation (in fifteen minutes),⁵.

Eye.—Dull, heavy, grinding pain in the left eye (first day),⁴.—Pain over right eye (five minutes after fourth dose),¹.—Pain in the lid of the right eye (in fifteen minutes),⁵.—Watering of the eyes and nose (five minutes after fourth dose),¹.

Ear.—Darting pain under and back of the right ear (five minutes after second dose, third day),³.—A dull pain in the right ear, seeming to affect the jaw-socket, the kind of pain which one has when he don't know whether it is his tooth or ear that aches; this pain lasted two hours, and then gradually wore away (after one hour, second day),¹.—Ringing in ears, more particularly in right ear (three-quarters of an hour after third dose),¹.

Nose.—[30.] Discharge of mucus from the nose, with congested feeling, as if it were about to bleed (first day),⁴.—Discharge of dry and bloody scales of mucus from the nose (second day),⁴.—Decided catarrhal symptoms (five minutes after fourth dose),¹.—Right nostril seems filled up (five minutes after second dose, third day),³.—Dryness of both nostrils (after third dose),¹.

Face.—Pain in lower jaw and left side (in two hours),⁵.

Mouth.—A smart peppery taste in mouth and fauces (immediately after first dose); same sensation in mouth and throat, which soon extended to stomach (after second dose),¹.—Strong peppery sensation in mouth and throat (soon after second dose, third day),³.—Burning and dry feeling in mouth and tongue (first day),⁴.

Throat.—Sensation of soreness in right side of throat (five minutes after second dose, third day),³.—[40.] Soreness of throat, with expectoration of tough mucus (two hours after second dose, third day),³.—Pain in right side of throat (in one hour),⁵.—A feeling of enlargement of the throat (in one hour),⁵.—After dinner, felt a bunch in the left side of the throat when swallowing; on going to bed, bunch in throat shifted to right side (second day),³.

Stomach.—No appetite (fifth day),¹.—Anorexia, could eat but a few mouthfuls at breakfast, and could only drink half a cup of coffee, which was vomited soon afterwards (second day),⁴.—Empty eructations, with slight taste of ingesta (first day),⁴.—Nausea (after five minutes),².—Slight nausea, with sense of oppression at the stomach; nausea increased, accompanied with frequent chills (after ten minutes),⁶.—Nausea, with headache (half an hour after third dose),¹.—[50.] Feeling of fulness or pressure at the epigastrium (first day),⁴.

Abdomen.—Some pain in right side below ribs (two hours after second dose, third day),³.—Flatulence,^{1,3}.—Rumbling of the abdomen, with

soreness on pressure (first day),⁴.—Soon after waking, at 7 A.M., next morning, had severe griping abdominal pains, with thin, brown, diarrhœic discharge, mixed with some mucus (first day),⁴.—Griping pain, on waking in the morning, continued at intervals through the day, with a general feeling of indifference and malaise (second day),⁵.

Stool.—Constipation in the morning, after supper discharge from bowels (second day); in fifteen minutes discharge from bowels; also another after breakfast and at 6 P.M. (third day); a discharge before breakfast, and one after (fourth day),³.

Urinary Organs.—Urine at night, and the next morning, scanty and high-colored (after fourth dose),¹.

Sexual Organs.—Quiet flowing, with increase of head difficulties, being two days in advance of proper time (second day); went to sleep as usual, and awoke in *dreadful distress and pain*, baffling description; profuse flowing; the pain (or agony) continued until noon of next day, when it gradually subsided,⁷.—*Menses appeared next morning, being one week before the usual time; attended with a good deal of pain*,⁶.

Respiratory Organs.—[60.] Hoarseness, with some husky feeling in the throat; obliged to clear the throat frequently. This hoarseness and obstruction of the throat continued some days after the other symptoms had subsided,⁴.—Slight hacking cough (third day),³.—Constant desire to take a long breath (after third dose),¹.—Continual desire to take long and deep respirations (five minutes after fourth dose),¹.—Increased desire for long respiration (fifteen minutes after fourth dose),¹.

Chest.—Felt a good deal of tightening about the chest, which continued, with much inclination to gape (one hour after second dose, third day),³.—Sharp shooting pains in right side (like pleurisy pains), occasionally extending through to the shoulderblade; these pains increased in severity, and lasted half an hour (fifteen minutes after second dose); during this time, there was a continual desire to take a long breath,¹.

Pulse.—Increased pulse (after second dose),¹.—Pulse 100 (three-quarters of an hour after third dose),¹.—Pulse 100 (in five minutes); 100, but more feeble (after twenty minutes); 82, feeble and irregular (after one hour),².—[70.] Pulse 80 (before experiment); 74, soft (in ten minutes),⁶.

Extremities.—Dull pain in left knee; also in left elbow, extending to the hand; then in left side and top of left foot (in one hour),⁵.

Superior Extremities.—The whole left arm and shoulder numb (in two hours),⁵.—Severe pain in the right arm, commencing just above the bend of the elbow (half an hour after third dose),¹.—Pain in right arm (fifteen minutes after fourth dose),¹.—Slight pain inside right arm, just above elbow (fifteen minutes after second dose, third day),³.—Pain in both elbows (in fifteen minutes),⁵.—Dull pain in left elbow, passing to the palm of the hand, then to the shoulder (in one hour),⁵.—Pain in left elbow and left side of head (in one hour),⁵.—Severe pain in the wrist, and extending to the thumb (half an hour after third dose),¹.—[80.] A flash of pain in right thumb, extending to hand (two hours after second dose, third day),³.

Inferior Extremities.—Weakness of the lower limbs, with pain in the knees (soon); pains of the extremities increased, accompanied with frequent chills (after ten minutes),⁶.—Pain in the left leg, between the hip and knee (in one hour),⁵.—Pain in left knee (in one hour); very severe (in two hours); the pain has lasted without cessation, a little more than half an hour,⁶.—Dull pain in right knee (in ten minutes),⁵.—Pain in right knee (fifteen minutes after fourth dose),¹.—Legs and feet feel tired (two

hours after second dose, third day),³.—Pain in right leg (second morning),³.—A flash of pain in calf of right leg (two hours after second dose, third day),³.—Pain in ankle (in one hour),⁵.—[90.] Pain in both feet, shooting up to the knees (in two hours),⁵.—Pain in left heel (in one hour),⁵.

Generalities.—Awoke in the morning, languid and depressed (fifth day),¹.—Pain in left side (in one hour),⁵.—Slight pain in left side, and under the left shoulderblade, also the left hip (in two hours),⁵.—Some pain in the left side (after second dose),⁶.—Sharp pains in right side of a neuralgic character (half an hour after third dose),¹.—Pain in right side (five minutes after fourth dose),¹.—A feeling of numbness through the whole of the left side of the body from head to foot, the division made perceptible in the head, affecting half of the nose; this feeling lasted two or three minutes (in one hour),⁵.—Sharp shooting pain (five minutes after fourth dose),¹.

Sleep.—[100.] Gaping (after third dose),¹.—Continued gaping (two hours after second dose, third day),³.—Drowsiness, all the evening (after fourth dose),¹.—Drowsy symptoms appear prominent (fifteen minutes after second dose, third day),³.—The same desire for sleep and long respirations (immediately),².—Sleepy all the morning (after dose, second and third days),³.—Slept soundly without dreaming (first day),⁴.—Slept hard all night (first and fourth nights),¹.—Slept hard and heavy; dreamed of flying about over tops of houses (first night),³.

Fever.—Frequent chills, with pains in the extremities (after ten minutes),⁶.—[110.] Great heat (after fourth dose),⁷.—Flash of heat (in one hour),⁵.—Sense of heat all over the veins, with a desire to be bled; flash of heat from head to foot (in half an hour),⁵.—A degree of heat all over the body (after second dose),¹.

YUCCA.

Yucca filamentosa, Linn.

Natural order, Melanthaceæ (Liliaceæ).

Common name, Bear grass.

Preparation, Tincture of root and leaves when not in flower, or tincture of flowers (Burdick).

Authorities. Charles E. Rowell, M.D., North Amer. Journ. of Hom., New Ser., vol. vi, 1875, p. 29. **1**, he took drop doses of 30th every two hours (first day), same every hour (second day), 2-drop doses every hour (third day), same every half hour (fourth day), 1-drop doses every two hours (seventh and eighth days), 3 drop doses every hour, and at 9 P.M. 6 drops, and at 11 P.M. 10 drops (thirteenth day), 5 drops at 2 P.M. (fifteenth day); **2**, his wife took 3 drops in the morning; **3**, a boy, æt. nine months, took 2 drops in the morning (first day), same at 8 A.M. (second day); **4**, Edward E. (when beginning proving had a hard cold) took 2 drops every hour (first, second, and third days); **5**, Buck Carbeter, has nasal catarrh, took three doses of 2 drops each (first day); 3 drops about once in three hours (second day); **6**, H. D. Baldwin took a dose.

Mind.—Have got the blues; unsatisfied feeling (eighth day),⁵.—2 P.M., feel very despondent; “have the blues” (fourteenth day),¹.—Wish I hadn’t commenced to prove this drug (sixteenth day),¹.—Feel very despondent and irritable (twenty-first day),¹.—Very irritable (fifth day),⁵.—4 P.M., ir-
resolute, changing mind about once in fifteen minutes; don’t know what

to do; can't keep easy (fourteenth day),¹.—Disinclination to study (second day),⁵.—Hard work to keep my mind upon the lectures (eighteenth day),¹.—Mind wanders from lectures (eighteenth, nineteenth, and twentieth days),¹.—[10.] Use wrong words in writing (twenty-first day),¹.—Inability to think; use the wrong words when talking (third day),⁶.—Inability to remember anything I read, with severe pains, which appeared first upon the right side, then in the apex of the heart (second day),⁶.

Head.—1.30 P.M., dull sensation in head when others are talking to me; although I hear what they say, I do not seem to understand them; two minutes afterwards don't know what they have said (fifteenth day),¹.—Headache in forehead (fourth day),⁴.—Frontal headache of pressing character (fourth day),⁵.—Heavy frontal headache, in the evening (first day),².—The arteries of the forehead throb (seventeenth day),¹.—Pressing pain in both temples all day long (fifth day),¹.—A little pain in temples of an aching character (sixth day),¹.—[20.] 8 A.M., pain in both temples, most severe on the right side; lasted all forenoon; also a cringing feeling in both temples, worse from motion (fifteenth day),¹.—Dull heavy pain in both temples, which seemed to extend into the eyes, causing considerable aversion to light (ten minutes after a dose, fifteenth day),¹.—9 P.M., aching pain in both temples (fifteenth day),¹.—Intense aching in both temples, worse from motion and worse from heat, but at the same time chilliness when away from the stove (seventeenth day),¹.—3 P.M., momentary pain in temples (eighteenth and nineteenth days); at 7.30 P.M. (twentieth day),¹.—Intense headache all day long in both temples; worse from any noise (twenty-first day),¹.—Headache somewhat easier when sitting still, but worse when moving around; is worse from any noise; a throb in the head with every step (twenty-first day),¹.—3 P.M., momentary pain in left temple (seventh day),⁵.—Strange feeling in temporal maxillary articulation (fifth day),¹.—Arteries of temples throb (fifteenth and twenty-first days),¹.—[30.] My head has been itching all the evening, very annoying, causing constant scratching and digging (sixteenth day),¹.

Eye.—Dark rings under the eyes (tenth, eleventh, and fourteenth days),¹; (second day),²; (third and fifth days),⁵.—Eyes feel hot and inflamed, although no objective symptoms of inflammation are present (third day),⁶.—Itching and smarting of left eye (sixteenth day),¹.—8 P.M., momentary dull pain over left eye (second day),⁵.—Itching of inner canthus of left eye, with smarting after rubbing (sixth day),¹.—Itching of inner canthus of left eye (ninth and sixteenth days),¹.—10 A.M., itching of the inner canthus of the left eye; very annoying; eye looks red (sixteenth day),¹.

Ear.—6.30 P.M., pain back of right ear (fourteenth day),¹.—Very sensitive to the least noise (seventeenth day),¹.

Nose.—[40.] Redness of the whole nose, at 8 P.M. (fourteenth day),¹.—This evening right side of nose constantly running, the left side dry (fourth day),¹.—Running of nose (ninth day),¹.—Profuse watery discharge from nose; discharge mild (eighteenth day),¹.—Some coryza (twenty-first day),¹.—Catarrh worse (after one day),⁵.

Face.—Pale face (tenth, eleventh, and sixteenth days),¹; (fifth day),⁵.—Face flushed, at 10 P.M. (second day),⁵.—Flushed face in the morning, with burning of face in the evening (first day); flushed face (second day),².—Yellow color of face (twenty-first day),¹.—[50.] At 6 P.M., momentary aching pain in zygoma, recurring several times (seventh day),¹.—At 11

P.M., both cheeks very red (first day); 9 A.M., face flushed (second day),³.—Pain in articulation of jaws (seventeenth day),¹.

Mouth.—Tongue coated white in the evening (fourth and tenth days); with elevation of scattered papillæ (fourteenth day); 9 P.M., tongue looks as if it had been parboiled, with irregular elevation of scattered papillæ upon surface (fifteenth day); tongue coated white at the root and has a greasy look (sixteenth day); tongue of a bluish-white color (seventeenth day); white coating at root of tongue (eighteenth day); a very sore pimple upon end of tongue (nineteenth day),¹.—Tongue pale, reddish, and flabby; elevated papillæ; teeth-marks upon the edge; trembles when he puts it out,⁵.—Bad smell from mouth (so others say), (second day),⁵.—Dryness of back part of mouth (sixth day),⁵.—Soft palate seems to be dry; had to drink water to moisten it (sixth day),⁵.—Taste in mouth like rotten eggs (fifth day),⁵.

Throat.—A sensation as if something were hanging down from the posterior nares; can't get it up or down (sixteenth day),¹.—[60.] Tonsils dark-red color; not sore (sixteenth day),¹.—The pharynx seems to be covered with granules, and is of a dark-red color (sixteenth day),¹.—12 M., throat not so red as it was yesterday; every time I look at the throat can see a string of mucus hanging from uvula to root of tongue (seventeenth day),¹.—Pharynx, tonsils, and uvula of a dark-red color, and seemed to be covered with a greasy-looking mucus, which is stringy (eighteenth day),¹.

Stomach.—Appetite increased and food tastes unusually well; ate half more breakfast than usual (seventeenth day); appetite poor (twenty-first day),¹.—No appetite (fourth day),⁴.—Aching pain in the stomach, in the evening (first day),².—Some slight pains in the stomach (second day),².—Region of stomach sensitive to touch (fourteenth and sixteenth days),¹.—6 P.M., very severe sharp pain in stomach, extending down into intestines, worse from pressure (fourteenth day),¹.—[70.] 3 P.M., cramping pain in stomach (fifteenth day),¹.—Sore feeling in stomach (sixteenth day),¹.

Abdomen.—Abdomen bloated (eighth and following days),¹; (sixth day),⁵.—6.30 P.M., after eating dinner, abdomen bloated very much, and had a sore sensation all through it (sixteenth day),¹.—Abdomen a little bloated this evening, with some pain (nineteenth day),¹.—Continued discharge of flatus (third day),⁵.—Discharge of much flatus (second day); some discharge (third day); flatulence (fifth day),⁴.—Emission of a great deal of flatus, which has no smell (ninth day),¹.—During the whole evening have had a great deal of flatus discharged from below (fourteenth day),¹.—Discharge of considerable flatus, 3 P.M. (fifteenth day),¹.—[80.] Discharge of much scentless flatus this evening (sixteenth day),¹.—Great rumbling of wind in lower portion of bowels, in the evening (first day),².—Abdomen sensitive to touch (third and fourth days),⁵.—After stool pain of a griping character, relieved by bending forward (fourth day),².—Heavy aching pains in the bowels before the stool; aching pains during and after stool (sixteenth day),¹.—Aching pains in bowels, relieved by a discharge of flatus, but recurring (eighteenth day),¹.—Aching pain in bowels before and during stool? not so severe after stool (eighteenth day),¹.—Colicky pains in bowels, with discharge of much flatus; pain in bowels is worse from pressure (second day); some pain in bowels (third day),⁴.—After breakfast had several crampy pains in abdomen; had to lie down, which seemed to relieve them somewhat; the pains are worse if she stirs, but better when keeping quiet; these pains lasted about half an hour, and were followed by diarrhoea (first day),².—Sharp pains in lower portion of bowels, both before and after the

stool (first day),².—[90.] Throbbing feeling in right side about twelfth rib, not painful, evening (fourth day),¹.

Rectum and Anus.—Constant desire for stool (eighteenth day),¹.—During forenoon sudden violent tenesmus, followed by discharge of wind, which relieved me of the pain; this occurred several times (sixteenth day),¹.—Tenesmus after stool (fourth day),⁶.—Constant recurring inclination to go to stool, relieved for a time by passage of wind (fourth day),⁵.

Stool.—Diarrhœa followed pains in abdomen; had several stools of a yellowish color within an hour (first day),⁷.—Increased number of stools (three) of natural color and consistency, but smaller than usual (eighth day); three stools, small but natural (tenth day); woke up at 6.30 A.M., and had to go to stool immediately; stool was very copious; first part hard and very difficult to expel—hard stool was of large size, last part of stool soft (sixteenth day); 6.30 A.M., had to get up and go to stool, which was copious; the first part hard, last part thin and watery; 7.15 A.M., copious thin stool, yellowish-brown in color, with smarting of the anus during stool; sat a long time at stool, and strained very hard; when stool once started, run away like water (eighteenth day),¹.—Number of stools increased, but smaller in size (third day),⁴.—Stools increased in number; brown color; softer consistency than usual (fourth day),⁵.

Urinary Organs.—Irritable condition of bladder; have to urinate often (seventeenth day),¹.—[100.] Painless redness around the opening of the urethra (fifth day),⁵.—Around the meatus urinarius is a circumscribed, oedematous, red swelling, extending about two lines out upon the glans; no sensation whatever in it (sixteenth day),¹.—When urinating, burning sensation (fifth day),⁵.—Specific gravity of urine 26 or 28, varies between (before proving); urine increased in quantity, specific gravity 28 (sixteenth day),¹.—Urine increased in quantity, specific gravity 30 (seventeenth day),¹.—Urine increased in quantity, normal color, and specific gravity 30 (eighteenth day),¹.—Urine slightly increased in quantity and normal color (fifth day),⁵.—Decreased frequency to urinate (seventh day),⁵.

Sexual Organs.—Erections several times at night (fourth day),⁵.—Erections all night long, but no emission (eighteenth day),¹.—[110.] Mind is constantly dwelling upon the sexual subjects; have had an erection all the forenoon; can't study; soon as I commence my mind runs off, and I begin to think of women (seventeenth day),¹.

Respiratory Organs.—Hard, rattling cough (twenty-first day),¹.

Chest.—A sensation of constriction in whole chest, also in heart (third day),⁶.—9.15 P.M., pain in intercostal muscles at upper portion of chest (second day),⁵.—At 3.30 P.M., had a severe crampy pain in the right side of chest, *very severe*; was worse when stooping over, and partially relieved by sitting straight or leaning a little backward; lasted about five minutes (twenty-first day),¹.

Heart and Pulse.—Momentary aching pain in vicinity of heart (twenty-first day),¹.—Can see arteries in hand throb (twenty-first day),¹.—Pulse full and heavy (first day),².—Pulse 80 (fourth day); 78 (fifth day),⁴.—Pulse 76 (before experiment); 76, and full (fifth day); 82, and very full (fifteenth day); 78, full and a little irregular (seventeenth day); 72, and regular (eighteenth day); 84 (twenty-first day),¹.

Neck and Back.—[120.] Constriction of muscles of neck; seemed as though they were going to draw the head backwards (third day),⁶.—In evening had tight feeling around neck, had to take off collar (fifth day),⁴.

—9 P.M., pain in left shoulderblade (second day),⁵.—At 9.15 severe pain in left shoulderblade (first day),⁶.—Backache ever since she took the drug (seventeenth day),².

Inferior Extremities.—Sore crampy pains in muscle of back part of left leg, just above ankle; feels as though it were sprained; this pain lasted about ten minutes (twenty-first day),¹.—Crampy pains in knees (fourth day),⁴.

Generalities.—Feel unusually well this evening (seventeenth day),¹.—12 M., is very restless, and seems very feverish; 3 P.M., wants to be held all the time (first day); some restless last night; restless; plays but little while with his playthings, then wants to be held; this evening sat up two hours after his usual bedtime (second day),³.—No effect except to loosen cold a great deal (first day),⁴.—[130.] The symptoms interfering with my studies antidoted the effect with cocculus (third day),⁶.

Sleep.—In the evening very sleepy, and went to bed two hours earlier than usual (first day),⁵.—At a lecture to-night was so sleepy that I could hardly keep my eyes open (sixteenth day),¹.—Woke up several times at night with an erection, but no sexual desire (fifteenth night),¹.—Restless last night (ninth day),⁵.—Lewd dreams (eighteenth day),¹.

Fever.—10.30, a coldness of the scalp upon left side of head, as though cold air were flowing upon it (first day),⁶.—Coldness; cannot bear to be away from the fire (second day),⁶.—Feel very hot (fourth day),⁴.—Feel feverish (twenty-first day),¹.—[140.] Face sweats in the evening (first day),².

Conditions.—**Aggravation.**—(*Heat*), Aching in temples.—(*Motion*), Aching in temples; pain in bowels.—(*Noise*), Pain in temples.—(*Pressure*), Pain in stomach.—(*Sleeping*), Pain in chest.

Amelioration.—(*Bending forward*), Gripping pain.

ZINCUM.

An element.

Preparation, Triturations of the metal.

Authorities. (Nos. 1 to 12, from Hahnemann, Chr. Kn.). 1, Hahnemann; 2, Franz; 3, von Gersdorff; 4, Hartlaub; 5, Hartmann; 6, Haulbold; 7, Lesquereux; 8, Neunung; 9, Ruckert; 10, Rummell; 11, Schweikert; 12, Stapf; (13 to 21, from Franz, Archiv. f. Hom., 6, Part 2, p. 188); 13, Hahnemann, from external use of preparations of Zinc; 14, Fr. Hahnemann; 15, Rust's Mag., 21, 563, effects on an apothecary of inhaling the dust when making the flowers of Zinc, ill for three weeks; 16, Robol in Samml., aus Abh. f. pr. Aerzt., vol. vii, p. 449; 17, Reil, Mem. Clin. Fasc. 4, pr. 5, exp. 2; 18, Hart, Diss. de Zinc, 1772; 19, Loeske, Abh. von Aus. Arzn., 1754, p. 484; 20, Dr. Scherer, in Struve's Triumph; 21, Dr. Goodsir, Edinb. Med. and Phil. Comment.; 22, Hahnemann, ibid., effects on himself and others of long-continued holding of zinc plates between the hands (Perkinismus); 23, Schreter, New Archiv. Hom., vol. iii, p. 187; (24 to 32 a, from Wernek, Hygea, 14, 481, fifteen persons had no results from 4 grs. of the flowers); 24, effects of 6 grs.; 25, doses of 8 grs.; 26, a man, æt. twenty-four years, took every two hours doses increasing by 1 gr., so that he took 21 grs. in twelve hours; 27, Wernek took repeated doses of 4 grs.; 27 a, same, took 7 grs. in the morning, increasing the dose every two hours, so that he took 57 grs. in ten hours; 28, a woman, æt.

twenty-nine years, took 2 grs. every two hours, for three days, 36 grs. in all; **29**, a woman, æt. thirty years, took every second day a dose of 6, 7, 8, 9, 10, and 11 grs.; **30**, a girl took 2 grs. in the evening; **31**, B., æt. twenty-seven years, took 4 grs. (first day); 5 grs. (second day); **31 a**, same, took 6 grs., and after two days 8 grs.; **32**, M., æt. twenty-six years, took 4 grs. in the morning; **32 a**, same, took doses of 6, 7, and 10 grs. at different times; **33**, Dr. Elfes, *Rust's Mag.* 1 (*Frank's Mag.*, 1), effects of the vapor; **34**, M. Schueler, *Journ. de Med.* (Christison on Poisons, p. 389), effects of a very large dose; **35**, Dr. Sigmond, *Lancet*, 1837-8, (1), p. 884, an apothecary's apprentice filled the laboratory with smoke in preparing flowers of Zinc; **36**, M. Blandlet, *Journ. de Méd.*, 1845 (Lond. and Edinb. Med. Journ., 1846 (1), p. 153), effects on brassfounders exposed to vaporized Zinc; **37**, *Est. Med. Woch.*, 1847 (A. H. Z. 74, 117), effects on workers; **38**, Reboulleau, *ibid.*, observations on workers and on himself; **39**, Landouzy and Mauméné, *Gaz. Med. de Paris*, June, 1850 (Lond. and Edinb. Med. Journ., 1850 (2), p. 182), effects of the dust upon workmen employed in twisting galvanized wire; **40**, Dr. Bouvier, *Compte de l'Acad. des Sci.*, May, 1850 (*ibid.*), a man, æt. forty-two years, was employed in barrelling oxide of Zinc; **41**, Cattell, *Brit. Journ. of Hom.*, vol. xi, 1853, p. 173, Zinc metallicum; **42**, same, Zinc oxydum; **43**, Pereira, *Month. Hom. Rev.*, vol. vi, p. 23, effects of the oxide on a healthy subject; **44**, Dr. Greenhow, *Med. Times and Gaz.*, 1862 (1), p. 227; effects of the fumes of Zinc on brassfounders; **45**, Robert T. Cooper, M.D., *Month. Hom. Rev.*, vol. xv, 1871, p. 392, symptoms in a Zinc engraver, æt. thirty-six years; (46 to 49, from J. Heber Smith, M.D., *New Eng. Med. Gaz.*, 1871, p. 333); **46**, effects on two girls of drinking water brought through seventy feet of galvanized iron pipe; **47**, additional symptoms in the younger girl, æt. five and a half years; **48**, effects on a brother of same, æt. thirteen years, fatal; **49**, symptoms observed in other patients; **50**, *Boston Journ. of Chemistry* (*Hahn. Month.*, vol. vi, 1871, p. 436), effects on a man and his wife of drinking water brought through a galvanized iron pipe; **51**, *ibid.* (*Hahn. Month.*, vol. vii), symptoms in a lady from a similar cause; **52**, Dr. Leo Popoff, *Berlin Klin. Woch.*, 1873, No. 5 (*Brit. and For. Med.-Chir. Rev.*, 1873 (2), p. 254), symptoms in a man, æt. thirty-six years, who had been a brassfounder, for twelve years; **53**, L. W. Bertridg, *Am. Journ. Hom. Mat. Med.*, New Ser., vol. iv, 1874, p. 125, took 10 glob. em. (Fincke) at 10.25 A.M.; **54**, same, Mr. H., took 200 (Lehrman); (55 to 57, from J. W. von Tunzelmann, M.D., *Brit. Journ. of Hom.*, vol. xxxii, 1874, p. 610, effects of drinking well-water containing 58 grs. carbonate of Zinc per gallon); **55**, a young lady, who three months before had been cured of diplopia, languor, etc., which were the effects of drinking water impregnated with lead; **56**, sister of above, who had been cured of rachialgia running into incipient paraplegia, which also was the result of drinking lead-water; **57**, the mother of the above; **58**, Dr. Michaelis, no effects from 2 grs. daily, afterwards took repeated doses of 3 to 6 grs.

Mind.—*Emotional*. Fanciful illusions when holding the head down, as though she had a large goitre, which she could not see over.².—Attacks of great loquacity.³.—Much talking of other people, even of those of whom he is fond, affects his nerves, and makes him morose and impatient.³.—Talking and listening were distressing.^{3a}.—Lively and excited.⁴.—Very joyful, excited mood, especially towards evening.³.—He is frequently able to laugh excessively over a trifle, but he is just as easily

vexed,¹.—Good-humored and talkative,⁸.—[10.] Very happy at times,⁷.—Easily excited to anger, and very much affected thereby,³.—Easily excited to anger, but quiet,¹.—*Easily becomes angered*,¹⁸.—Vexation and anxiety,¹.—He wishes that he might get hold of some one on whom he could vent his anger (though irritated by nothing),⁷.—Great sensitiveness to noise,¹.—*Sobbing on account of vexation*, without obvious reason, with pressive pain in the top of the head,¹.—Overpowering sadness,⁷.—Despondent,¹.—[20.] Mood depressed and sad,⁸.—Somewhat depressed (after six days),¹.—*Anxiety*,^{18 26 30}.—During the menses anxiety,¹.—Anxious mood, as from a misfortune (first eight days),²³.—Anxiety that made her restless, in the morning (after eight days),²³.—Very uneasy mood, as though he had committed a crime,²⁷.—Mood uneasy, unsteady (after two days),¹.—Anxiety on account of thieves or horrible apparitions while awake, like a feverish fancy,¹.—Apprehension and ennui; she seeks society,⁸.—[30.] Apprehensive and lachrymose mood, which disappears in the evening,⁷.—Hypochondriac mood three hours after dinner, with pressure under the short ribs, especially of the right side, with aversion to work and discomfort over the whole body, without trace of flatulence or of overloading the stomach (after five days),¹.—Irritable, startled,¹.—Easily irritated, peevish; the talking of other people and every noise are intolerable,³.—At noon, irritable, peevish, terrified; in the evening better,¹.—Ill-humored and indolent (first days); lively and joyful later,¹.—Ill-humored and sad (second day),¹.—Ill-humor,^{11 26}.—Very impatient, but not bad-humored,⁷.—Morose in the morning (eighth day),¹.—[40.] Extremely gloomy and morose,⁶.—She looks very morose, gloomy and disturbed, even in the morning,⁸.—Morose and peevish in the evening, though well disposed,⁸.—Morose, peevish, and fretful, in the afternoon,⁸.—During the menses peevish and lachrymose,¹.—Fretful, morose, several days, inclined to have a secret grudge and to vexation; he is for the most part quiet, and it frets him to be obliged to speak a word,².—*Fretful, despondent mood, especially in the evening*,³.—Indifferent (after thirteen days),¹.—Alternately irritable, fretful, quarrelsome, despondent, and depressed,¹.—Extremely variable mood; sad at noon, melancholy; in the evening contented and happy (second and third days),⁷.—**Intellectual.** [50.] Dread of work, disinclination to work,^{1 31a}.—**Mental operations very difficult* (first eight days),²³.—**Difficult to grasp ideas and to co-ordinate thoughts*,¹.—Answers were slow, and he spoke as if in a bad temper,³².—Imaginative power excited (first day),⁷.—Quiet thoughts of death in the afternoon, with weakness,¹.—Disconnected ideas (after sixteen days),¹.—**Loss of thought and a soporose condition of mind*,¹.—**Forgetful of what has been accomplished during the day*,¹.—**Great forgetfulness*,^{1 45}.

Head.—**Vertigo.** [60.] **Vertigo*,^{13 27 38}, etc.—Dizziness after dinner,¹⁰.—Vertigo and flushing heat,^{27a}.—Vertigo, with headache in the morning (third day),²⁶.—Dizziness, as if he saw through a mist, after eating,¹⁰.—When standing on a height, vertigo as if I should fall to the right (seventh day),⁵³.—Vertigo, with weakness of the head and abdomen, so that she is obliged to lie down (after three days),¹.—Vertigo while sitting and standing, which disappears on walking,¹.—Dizzy, nauseating weakness on remaining up rather long in the evening, as after smoking too strong tobacco,¹⁰.—Vertigo in the whole brain, especially in the occiput, as if he would fall over, without affecting the eyes; while standing (after one, two, and four hours),².—[70.] Dizzy drawing deep in the right side of the occiput, while sitting,².—In the morning on waking, vertigo as if the head were moving up and down, with a similar floating of the images of his

fancy; all during a semi-consciousness,¹⁰.—**Frequent attacks of vertigo, preceded by sharp pressure at the root of the nose, and a sensation of drawing together of the eyes, as if by a cord, followed immediately by excessive nausea, faintness, and trembling of the hands*,⁹.—Vertigo, as if he would have apoplexy, with anxiety and fear of falling headlong,¹.—Vertigo in the occiput in the evening while sitting and smoking as usual, with desire for stool,².—**Vertigo in the occiput, as if he would fall to the left, while walking* (immediately),².—Vertigo from morning till noon, it frequently seems as though she would fall (after three days),²³.—Great vertigo while sitting up in bed, as if the bed were constantly swaying back and forth (after seven days),¹.—Violent vertigo after rising up from stooping, as though everything were whirling around, with buzzing in the head even in the morning,⁸.—Vertigo, that he could scarcely stand,³⁵.—[80.] **Vertigo so violent that he could not stand* (after three days),¹⁵ ³³.—Temporary intoxication,⁴³.—**General Head.** Inability to support the head, in the evening,⁴⁷.—Dulness of the head,²³ ²⁷ ^{32a}.—Head dull on waking,³².—Great dulness of the head,^{27a}.—Great dulness of the head after a meal (after seven hours),².—Dulness of the head on waking in the morning (second day),²⁷.—Heaviness of the head, as if it would fall down,⁸.—The head is heavy, dizzy, and confused in the morning, as from loss of sleep,⁸.—[90.] Weak feeling in the head, especially in the eyes (second, fourth, and several other days),⁷.—Head oppressed,^{28a}.—Stupefied and dizzy at noon,¹.—Stupefying headache, is obliged to lie down (after four days),¹.—Dizzy stupefaction in short paroxysms, with blackness before the eyes and general weakness, especially in the afternoon and evening, for several days (after eleven days),⁷.—Stupefying headache, as from coal-gas, all the morning (after ten days),⁷.—Pressure in the head, with dulness (after five days),¹.—**Headache* (first day),¹⁵, etc.—Headache at night,⁷.—Headache with some vertigo (after eight hours),³⁶.—[100.] Intense headache,⁵².—Intense headache, with violent shivering,⁴².—Violent headache, relieved by washing with cold water,⁸.—**Violent pains in the head and eyes, after a glass of the accustomed wine*,⁷.—Pain as from a tearing in the whole brain,¹.—Pains in the head, relieved in the open air, worse in the house,⁸.—Intense pain in the brain, almost driving one mad, followed by excessive vomiting of bile, and trembling,⁴⁹.—Painful raging here and there in the head,⁸.—Fixed pain in the head, and sense of tightness across the temples,⁴¹.—Tearing and sticking in the right side of the head after dinner,⁸.—[110.] Sticking and tearing in the head and cutting in the abdomen, with yawning, during and after dinner,⁸.—Tingling and resounding in the head when speaking loud,¹.—Violent throbbing and tearing in the whole head, especially in the right frontal region, from morning till evening, after lying down,⁸.—**Forehead.** Constant dull frontal headache,⁴⁹.—Dull pain in the forehead, with unusual impatience,⁷.—The first ill effects noticed were a continuous dull pain across the frontal sinuses, accompanied with extreme sensibility of the cartilages of the ear and nose,⁵⁰.—During the menses heaviness in the forehead, with a feeling as if the head would be drawn backward, in the evening,⁸.—Headache in the region of the left frontal eminence, after dinner,².—Pain in the forehead,³⁶ ³⁷.—A sensation in the frontal sinuses, as though air forced itself in sensitively,¹.—[120.] Extreme sensitiveness in the forehead,⁵².—Tension and pressure in the forehead,^{32a}.—Pressure in the forehead,^{32a} ⁵⁴.—**Sharp pressure in a small spot in the forehead, in the evening*,¹.—**Pressure in the forehead, with dulness extending into the eyes, after dinner*,³.—Pressing headache in the forehead every morning (after seven days),¹.—Pressing

headache in the right frontal eminence,².—Pressure in the forehead, with dulness, which renders thought difficult,³.—Pressing headache in the forehead, a sharp pressure in the morning on waking; which afterwards becomes a simple pressure in the temples,¹⁰.—Pressing headache in the forehead, with general dulness of the head and sleepiness, and pain in the eyes, in the forenoon,³.—[130.] **Violent pressure upon a small spot in the middle of the forehead*, at short intervals,³.—**Frequent pressing headache in the forehead*.¹.—Drawing and throbbing in the forehead,⁸.—Drawing and sticking in the forehead, with pain as if the vertex would split,⁸.—Tearing in the forepart of the forehead (fourth day),³.—Tearing in the left frontal eminence,³.—Violent tearing pain in the forehead,⁸.—**Pressing tearing in the left frontal eminence, after dinner*,².—Tearing in the right frontal eminence, extending to the orbit and upper lid,³.—Tearing in the anterior left half of the head, above the forehead,³.—[140.] Tearing and crawling in the forepart of the forehead during supper,⁸.—Sticking tearing in the forehead, with violent ineffectual inclination to sneeze, towards noon,⁷.—Sticking in the forehead, with a tearing as though the head would burst,⁸.—A dull boring stitch just above the right frontal eminence (ninth day),³.—Dulness and heaviness in the whole sinciput,^{32a}.—Tense and dull pain in the sinciput and forehead,³².—*Pressure in the sinciput, with dulness at noon, and in the evening*,³.—Pressing pain in the sinciput, most violent in both temples,⁵.—Throbbing and tearing in the sinciput, after dinner,⁸.—**Temples.** Persistent aching and pressure in both temples,⁵.—[150.] Dull cramplike pressure in both temples,⁴.—Constant pressure, now in the temples, now in the sinciput,⁵.—Pressure in the right temple, suddenly shooting inward,⁵.—Pressure in the left temple,⁵.—Sharp pinching pressure in the left temple,³.—**A pinching tearing in the right and left temples at various times*,³.—Transient tearing in both temples,³.—**Tearing in the temples after dinner, with stitches in the right ear* (after second day),².—Tearing in the right temple,⁸.—**Tearing in the right temple, also just above it*,³.—[160.] Jerking tearing above the left temple,³.—Sticking tearing in the temples,⁷.—Dull stitches in the right temple from time to time (after a few hours),².—Stitches as with needles in the left temple,².—**Vertex and Parietals.** **Extreme sensitiveness of the vertex to touch, as if there were an ulcer, in the evening*,⁸.—**Drawing-pressing tearing on the top of the head, and still more in the forehead, in frequent transient attacks*,³.—Tearing in the upper part of the head and above the forehead,³.—Pressing tearing near the right side of the vertex (after three days),³.—Tearing behind the crown of the head (ninth day),³.—Sharp tearing in the vertex and left parietal bone,³.—[170.] Fine burning stitches in the middle of the vertex,¹¹.—Dull pain in the left half of the head,⁷.—Extremely painful pressing boring and pressure in the right side of the head (nineteenth day),⁸.—Pressing-drawing boring in the left side of the head, after dinner,⁸.—Frequent screwing-together pain in both sides of the head, in the evening,⁸.—A pulsating pressing and almost intolerable twinging in the right side of the head,⁸.—Boring pain in the right side of the head, more in the occiput, in the evening,⁸.—Boring in the right parietal bone, with a sensation of bursting, in the evening while standing,⁸.—Boring in the left parietal bone,⁸.—Drawing tearing in the left half of the head,³.—[180.] Tearing in the right side of the head and in the teeth, in the afternoon (after sixteen days),¹.—Tearing in the right half of the head (second and eighth days),³.—Throbbing pain in the right side of the head, in the evening,¹.—**Occiput.** Dulness and acute heaviness in the occiput (after a quarter of an hour),⁵.—

A pressing asunder pain in the right side of the occiput,⁵.—Pressure in the occiput for several hours after walking in the open air,¹.—Pressure in the right side of the occiput,³.—Drawing in the left side of the occiput,³.—Drawing in the occiput, with gnawing in the forehead, as from worms,⁸.—Painful forcing asunder in the left side of the occiput, close to the cervical vertebræ,⁵.—[190.] Painful gnawing on the right occipital protuberance, as by a mouse,⁸.—Suffers from a continual gnawing pain in the upper part of the back of the head,⁴⁵.—Bruised pain in the occiput,⁸.—Painful raging like the beating of waves, with a feeling of heat in a spot on the right side of the occiput, extending up over the vertex, in the evening,⁸.—Tearing in the right and left sides of the occiput (third and fourth days),³.—Tearing in the right side of the occiput, with dull stitches on the top of the head,⁸.—Tearing in the right side of the occiput when laughing,⁸.—Sticking and tearing in the right side of the head, above the temple, at night,²⁹.—Dull sticking pressure in a small spot on the occiput,³.—**External Head.** Itching pimples on the scalp (after five days),¹.—[200.] Itching moist eruption on and above both temples,¹.—Profuse falling of the hair of the head,¹.—Sensation as if the hair bristled, especially above the left ear,³.—The hair on the vertex is painful on the slightest touch,¹.—Feeling of soreness in the scalp, not affected by touch (after three days),².—Suppurating pain on one side of the scalp,¹.—Sharp tearing sticking in the skin of the left forehead, above the eyebrow,³.—Feeling as if the scalp were drawn together to one spot,¹⁰.—Drawing in the skin on the vertex,⁸.—Painful sore feeling in a small spot on the right side of the scalp,⁵.—[210.] Frequent sore itching in a small spot in the middle of the scalp,³.

Eye.—Objective. Violent inflammation of the eyes, without photophobia (during the menses),¹.—**Inflammation and redness of the conjunctiva of the right eye; suppuration in the inner canthus: the eyes are most painful in the evening and night, as from sand, with frequent lachrymation: even the upper lid towards the inner canthus is red and swollen,*¹.—**During the menses inflammation of the eyes,*¹.—Profuse moisture of the eyes during the day, in the morning they are agglutinated,¹.—Eyes turned outward,⁴⁷.—*Eyes constantly affected,*¹⁷.—**Subjective.** Weak, sick feeling in the eyes,².—Eyes feel as though she had wept much (after fourteen days),²⁵.—**Constant burning in the eyes, in the afternoon,*⁸.—[220.] **Much burning in the eyes and lids, in the morning and evening, with feeling of dryness and pressure in them,*¹⁰.—Pain in the eyes, as if pressed inward,⁷.—Great uneasiness and intolerable pain in the left eye frequently, with great weakness of the head (after six days),⁷.—Heavy pressure on the eyes,⁴⁹.—Pressure upon the eyes towards evening,³.—Tensive pressure in the right eye, like rheumatism,³.—Very frequent pressure upon the eyes,¹.—**Constant pressure in the left eye, in the evening,*².—Violent pressure in the right eye and in the temples,¹.—Violent pressing pain in the left eye, while walking in the open air,¹.—[230.] Pressing tearing in the left eye,³.—**Burning and biting, with photophobia of the eye, which waters, especially in the evening, and is agglutinated in the morning,*¹.—Tearing stitch above the left eye, and at the same time in the umbilical region,⁷.—**Tickling in the right eye, as from dust, frequently* (after four days),⁷.—Prickling biting in the lower portion of the left eye, and below it, upon the cheek,³.—Biting in the left eye, relieved by rubbing,⁸.—**Sore painful biting in the eyes, towards evening, especially in the right eye,*³.—Sticking tearing in the eyes and head,⁷.—Cutting-pressing stitch in the right eye (first and sixth days),³.—Itching of the

eyes (fifth day),⁷.—[240.] **Violent itching of the left eye*, relieved by rubbing.⁸.—**Brow and Orbit.** Jerking in the left eyebrow (soon, and after two hours),¹¹.—Pressure above the right eye, sudden and painful, with a pressing-down sensation in the lids,⁵.—Fine sticking tearing in and above the left brow,³.—**Lids.** Paralysis of the upper eyelids,⁴⁹.—Twitching of the left lower lid,⁵.—Falling of the upper lids and œdema of the lower,⁴⁷.—***Agglutination of the inner canthus, in the morning, with a pressing sore feeling** (after thirteen days),¹.—***Burning of the left lid, as if too dry**,¹⁰.—Feeling of soreness on the right upper lid,³.—[250.] ***Feeling of soreness in the inner canthi** (ninth day),³.—Soreness of the outer canthus, with biting pain,¹.—***Pressure on the margin of the left lower lid, near the inner canthus**,³.—***Painful pressure in the right inner canthus, with redness of the conjunctiva**,¹.—A pressing burning, especially in the left eyelid, when reading,¹⁰.—***Biting in the right inner canthus, relieved by rubbing**,⁸.—Fine sticking, as with needles, in the right lower and left upper lids,³.—***Itching and sticking pain in the inner angles of the eyes, with cloudiness of sight**,⁴⁹.—Itching on the margin of the left upper lid,³.—**Lachrymal Apparatus.** Lachrymation in the morning on waking, and also in the open air,⁵.—**Ball.** [260.] ***Feeling of dryness in the eyeball**,²².—Pressing sticking in the right eyeball (third day),³.—Twitching in the left eyeball,⁸.—**Pupil.** Pupils alternately dilated and contracted, but usually dilated,⁴⁷.—**Vision.** ***Dimness of vision** (after thirty-four hours),¹.—Dimness and mistiness of vision in the morning, after waking,⁵.—Vanishing of vision, with absence of mind,¹.—Vanishing of vision, with lachrymation and burning, after dinner, and frequently when writing, for fourteen days,⁸.—Diplopia; the left eye being more affected than the right; the diplopia increased, and decided strabismus became developed,⁵⁵.—Dread of sunlight, with dim, watery eyes,⁸.—[270.] ***A good deal of photophobia**,⁵⁶.—Objects apparently elongated, and at times double,⁴⁷.—Flickering before the eyes,¹.—Fiery flakes float in large circles in front of the eyes, when looking at the sky,¹⁰.—When looking up, a dark, diagonal line before left eye, directed upwards and to the right, about six feet in length,⁵⁴.—Yellow, blue, and green rings before the eyes, with a suffering look and sleepiness,⁸.

Ear.—Much purulent discharge from the left ear day and night; the orifice of the ear is swollen and hot, with left-sided headache (after twenty-four hours),¹.—An offensive moisture comes from the left ear (after eighteen days),¹.—Discharge from the left ear (after twenty-four hours),¹.—In the left ear increase of earwax, which was thinner than usual and impeded hearing; the beating of the pulse is very distinct, and causes roaring in the ear,^{32a}.—[280.] With the pain across the frontal sinuses, extreme sensibility of the cartilages of the ear and nose, so severe that the least friction or bending of the ear or the nasal cartilages would cause acute pain,⁵⁰.—Painful cramp in the lobule of the left ear,¹⁰.—Violent cramplike pain in the lobule of the left ear, extending down into the neck, on boring the finger into the ear,¹.—Pain, as after a blow on touch, beneath and in front of the right ear, in the bone,³.—Tearing in the bone in front of the left ear,³.—Pressing constrictive pain in the bone beneath and in front of the right ear, with dulness in the forehead,³.—Pinching drawing behind the left ear, extending into the lower jaw,³.—Pain in the ear,²².—Earache, jerk-like, from the mouth along the Eustachian tube,²².—***Tearing in the ears**,³.—[290.] Tearing in the ears at various times, at times with itching, or in the morning with crawling, or in the evening with burning,⁸.—***Frequent persistent cutting-tearing stitches deep in the right ear, near the drum** (first

and second days),².—Violent stitches in the ears,⁷.—Sticking and itching in the ear,¹.—Sticking in the right ear (seventh day),³.—Sticking and tearing in the left ear, close to the lobule,⁸.—A kind of pinching jerking within the ear,²².—Tickling in the left ear, not relieved by rubbing,⁸.—Itching in the right ear, relieved by boring into it,⁸.—Itching in the left ear, with a feeling on putting the finger into it, as if fleas were jumping about,⁸.—**Hearing.** [300.] Very great loss of hearing,¹.—Noise in the ears, which continues during the night,²¹.—Dull whizzing, and in the evening, pulsating in the ear, very annoying while writing,².—Whizzing in front of the right ear,³.—Ringing in the ears,^{36 37}.—Violent roaring in the ears,¹.—Ringing in the right ear at night,⁸.—Cracking and beating in the ear after breakfast,⁸.—A crash, as from the breaking of a pane of glass, in the ear, on falling asleep,¹³.

Nose.—Swelling on the right side of the nose (after forty-eight hours),¹.—[310.] Swelling and painfulness of the left wing of the nose,¹⁰.—Freezing of the tip of the nose and lobule of the ear in slight cold (after thirty-six hours),¹.—Sneezing after a meal,⁴.—*Sneezing, preceded by cutting crawling in the nose*, in the evening,³.—Frequent sneezing, without coryza,³.—Sneezing in the morning and afternoon,⁸.—Fluent coryza (first days), followed by dry coryza,¹.—Fluent coryza, with crawling in the nose, and frequent sneezing,¹.—Profuse coryza and raw throat (fourth day),¹.—Increased coryza, with stoppage of the nose, but running from the nose,^{32a}.—[320.] Fluent, alternating with dry, coryza, especially in the evening,¹.—Sudden coryza, in the evening, after lying down,⁸.—Fluent coryza towards evening, with pressure in the right tonsil on swallowing and yawning,¹.—Violent dry coryza all day, with pain in the back, especially while sitting,¹.—Increased discharge of mucus from the nose, without coryza (after twelve hours),¹.—Feeling of coryza, with sore sensitiveness of the nostrils,⁸.—Nosebleed for a short time on blowing the nose, after dinner, followed by stupefaction in the forehead, as from a stroke (of apoplexy), with swimming of objects before eyes,¹.—Frequent blowing of blood from the nose (first days),¹.—**Stoppage of the nose* (after fourteen days),¹⁸.—Stoppage of both nostrils; she could get no air through them, and was obliged to sleep with the mouth open (after five days),¹.—[330.] Irritation of the nasal mucous membrane, impeding respiration, with coryza,^{32a}.—**Feeling of soreness high up in the nostrils, in the right nostril a tearing*,³.—**Pressure upon the root of the nose, as if it would be pressed into the head, almost intolerable*; frequently, mostly at noon,⁸.—Pinching in the root of the nose, with stitches in the jaws,⁷.—Pinching in the root of the nose, extending into the eye,⁷.—Pinching in the root of the nose, with dulness in the forehead,³.—Drawing and tearing up the right nostril, after dinner,⁸.—Sharp cutting on the inner margin of the left wing of the nose,³.—Jerking tearing in the right side of the nose,⁸.—Fine tearing on the right side of the nose, externally,⁸.—[340.] Tickling and irritation in the mucous membrane of the nose, as if it would provoke sneezing,³².—Sticking pain in the septum of the nose when touched,¹⁰.—Itching in the right nostril,⁸.—Itching in the left nostril, followed by frequent sneezing, succeeded by very profuse nosebleed, which was stopped by cold water (tenth day),⁸.

Face.—Cachectic look, complexion bluish white,⁴⁷.—Expression vacant and apathetic, or irritable,⁴⁷.—A peculiarly cadaverous, pinched, unnatural expression of the face,⁵¹.—Face earthy, as after a long illness,⁸.—**Face pale*,^{2 6 27a}.—Face flushed,⁴⁸.—[350.] Spasmodic twitching of the muscoli

risores, with constant inclination to laugh,^{32a}.†—Contraction and spasmodic twitching of the muscles of the face, with constant nausea and incessant vomiting,^{32a}.—Bruised pain in the bones of the face and orbit (after a few hours),¹.—Jerklike stitches as from needles in the face,¹.—**Cheek.** Swelling and itching of the left cheek,¹.—Pressing pain in the upper jaw, near the left wing of the nose,³.—**Tearing in the malar bone, extending into the upper jaw* (after half an hour),²².—Tearing in the left cheek,⁸.—Tearing in the right malar bone, with bruised pain in that spot on pressure,⁸.—**A sudden pressing stitch from the right zygoma to the upper margin of the orbit, deep in the bone, followed by great sensitiveness of the spot, in the evening*,⁸.—**Lip.** [360.] Swelling of the lips,¹.—Swelling of the upper lip (after a few hours),¹.—Thick glutinous moisture on the lips, without odor or taste (sixth day),¹.—**Lips dry, cracked*,¹.—Dryness of the lips,^{31a}.—Violent muscular twitches in the left side of the upper lip,³.—Upper lip sore, ulcerating in the middle,¹⁰.—Pain in the lips, a jerking tearing in the right side of the upper lip,³.—Tensive painful smarting on the lower lip,⁸.—A transient stitch in the upper lip (after twenty minutes),¹¹.—[370.] Fine stitches in the upper lip (after a quarter of an hour),¹¹.—Burning smarting on the inner surface of the lower lip,⁸.—**Chin.** Cramplike tearing here and there in the lower jaw, especially in the chin (third day),³.—Tearing stitches, which pass into one another, in the chin and on the throat (sixth day),⁷.—Sticking pain in the articulation of the jaw, beneath and in front of the left ear, on moving the jaw backward and biting strongly, and on pressing the finger upon the joint,¹.

Mouth.—Teeth. Bleeding of the teeth and gum,³.—The teeth feel on edge,¹⁰.—Teeth seem on edge, but on separating the back teeth a sensation of softness and agglutination,³².—Painful sensitiveness of the upper molars, with drawing sore pain in a left lower molar, which protrudes from its socket and is loose; with swelling of the submaxillary gland of the same side,².—**Frequent toothache, a drawing pain in the roots of the incisors*,³.—[380.] Painful burning in all the front teeth, with biting on the lower surface of the tongue,³.—Drawing in the left upper incisors,³.—Drawing, now in the right, now in the left side of the lower farther back teeth,³.—A pressing drawing in the right lower back teeth,³.—Drawing pains in the roots of the upper front teeth, and at the same time in the pharynx, extending into the cervical muscles,³.—**Acute drawing in the upper front teeth, with a feeling of soreness on the gum, towards noon (after nine days)*,¹.—Sharp jerklike drawing suddenly in all the incisors,³.—**Painful jerking in a tooth* (after one hour),¹.—Jerking, violent tearing in the last lower back teeth of the right side,³.—**Sharp, jerking drawing in the two last back molars, at various times*,³.—[390.] Jerking in the right lower molars, in the evening, after lying down till falling asleep,⁸.—Jerking in the left teeth, from time to time,⁸.—Tearing and drawing in the left lower teeth, especially in the incisors,³.—Tearing in the roots of the right upper teeth (soon),⁸.—Tearing extending from the root of a right upper tooth towards the temple, in the evening after lying down,⁸.—**Tearing in a hollow molar; on sucking it blood comes, and on pressure the pain is for a time aggravated*,⁸.—Tearing in the left last lower molars, in the evening,⁸.—Tearing in the last left molars, above and below; then tearing in the cheek, extending up to the temple and forehead,⁸.—Tearing in the left upper molars,³.—Water seemed to come from the last right lower back tooth; when she touched it with the tongue

† See Eitner, Hufeland's Journal, 61, 161.

there was a violent sticking in it,²³.—[400.] Picking and pricking in the sound teeth, with drawing pains in the jaws (after nine days),¹.—Jerking stitches in the left lower molars, also in the evening after falling asleep, suddenly waking from sleep,⁴.—Stitches in the left row of teeth and jaw, and extending down into the neck,¹⁰.—Sticking in the roots of the left upper canine and in the adjacent incisors,³.—Sticking in the left lower molars, constantly in the evening,⁸.—Throbbing pain in a hollow tooth, only after eating or after becoming heated and getting cold,¹.—Throbbing drawing, alternately in the farther back teeth of the right and left sides,³.—**Gums.** *Profuse bleeding of the gum.*^{1 3}.—**Bleeding of the gum on the slightest touch.*¹.—Swelling of the gum (after twelve days),¹.—[410.] Sore painful swelling on the gum (fifteenth day),¹.—White pellicles on the gums,³⁹.—An ulcer on the root of a bad tooth is sensitive to touch, with an elongated feeling in the tooth; when pressing upon it blood comes,².—Gum white,¹.—The gum is painful, so that he cannot chew¹⁰.—The inner side of the gum is painful as if sore, as if separated from the teeth,¹⁰.—Biting and itching on the inner surface of the gum,¹⁰.—**Tongue.** Swelling of the left side of the tongue, which prevents talking,¹.—Tongue covered with white mucus (second day),²².—Tongue whitish,^{40 42}.—[420.] Tongue coated yellowish white, especially toward the root,¹.—Tongue coated white as from cheese, without taste, though feeling icy cold, in the morning (fourth day),⁸.—**Blisters on the tongue.*¹.—Blister on the tongue, painful on eating,¹.—Dirty, moist tongue,⁵¹.—Dryness of the tongue,⁸.—Tongue painful as if sore,¹.—**General Mouth.** Corner of the mouth sore, ulcerating,⁶.—Swelling of the palate and the cavity just behind the incisors, with pain on touch, for three days,³.—Inflammation of the palate³⁹.—[430.] A yellow ulcer on the inner surface of the left cheek, especially painful in the morning (third day),¹¹.—A yellow ulcer on the inner surface of the lower lip (after four days),¹¹.—Fetid breath,³⁹.—A bitter exhalation rises into the mouth,²².—Painfulness of the palate and gum during dinner, while chewing,³.—Simple pain posteriorly on the palate and on the velum palati, especially while yawning (after forty-eight hours),¹.—Burning in the right corner of the mouth (first day),³.—*Sticking biting on the palate close to and in the roots of the incisors.*³.—Crawling, as from large bubbles, on the inner surface of the cheeks (soon),¹¹.—**Saliva.** Salivation,^{15 33}, etc.—[440.] Collection of sour-bitter water in the mouth,²⁹.—Much saliva collects in the mouth (after thirteen days),²³.—Accumulation of saliva in the mouth, with qualmishness,¹.—Increased secretion of saliva, with a metallic taste in the mouth (first day),¹¹.—**Increased secretion of saliva, with crawling on the inner surface of the cheeks.*¹¹.—Frequent accumulation of water and saliva, in the mouth, with inclination to vomit,^{32a}.—Increased secretion of saliva with a metallic taste and transient stitches in the tip of the tongue,¹¹.—**Taste.** Clammy taste,⁴⁰.—Salt taste in the mouth and dryness in the throat,¹.—Taste in the mouth as after eating raw peas,¹.—[450.] Sweetish, flat taste in the mouth,³¹.—Taste as of a sweetish powder in throat,³⁹.—A sweet taste beneath the forepart of the tongue,¹⁰.—Taste of blood in the mouth, and a disagreeable sweet rising from the stomach,⁸.—Taste of blood in the mouth, with a feeling of dryness in the throat, and a sensation of soreness rising up from the chest,⁸.—Taste of bad cheese in the forepart of the mouth, disappearing on swallowing, to which he was impelled on account of mucus in the throat,⁸.—Bitter taste in the mouth (after a few days),¹.—Bitter slimy taste in the mouth, in the morning on waking, disappearing after

rising,⁸.—Coppery taste in the mouth,^{15 33 35}.—Decided metallic taste in the mouth,⁵².

Throat.—[460.] Raising of much black clotted blood, preceded by rawness and dryness in the throat, and hawking of mucus, in the morning while walking, with sore pain low down in the throat; followed all day by sweet taste in the mouth, dryness in the throat, and bloody saliva,⁸.—Large lumps of white mucus pass through the posterior nares into the mouth, without hawking,³.—Greenish mucus seated low down in the throat is expectorated, with sore pain in the upper part of the chest,¹.—Something like blood, with a sweetish taste, comes into the throat, in the evening after lying down,⁸.—A peculiar and persistent inflammation of the throat, with extensive ulceration of the pharynx and tonsils. The ulcers were round, sharply defined, with red, averted edges; they gradually coalesced. They were filled with a yellowish-white matter,¹⁶.—**Dryness of the throat*,¹⁶.—**Dryness of the throat, in the evening*,¹.—Dryness of the throat when swallowing and when not, after dinner,⁸.—**Throat dry, with accumulation of mucus in the larynx, and constant inclination to hawk up tenacious mucus, which soon again collects and again causes irritation*,^{32a}.—Burning sensation in the throat,¹⁶.—[470.] Burning like heartburn in the throat, even on swallowing,⁸.—A hot vapor rises in the throat,¹⁶.—Sensation of internal choking in the right side of the throat, only when not swallowing,⁸.—Rawness in the throat, even on swallowing,⁸.—**Rawness and dryness in the throat and larynx, frequently and at various times*, especially in the morning or after dinner, compelling to hawk or cough, at times disappearing after food,⁸.—Hoarseness and rawness in the throat, so that she could scarcely breathe,⁸.—Sore throat, swelling and ulceration of the tonsils,³⁹.—Anxious sore feeling in the throat, especially at night,¹.—Sore pain in the throat and a feeling of fulness in the œsophagus,¹.—Pain in the throat on swallowing, with swelling of the throat externally and in the tonsils,¹.—[480.] **Pain in the throat as from an internal swelling*, also on empty swallowing (after two and six days),¹.—Violent pain in the throat and at the angle of the jaw and the laryngeal region,³⁹.—**Tearing-drawing sore throat posteriorly in both sides of the pharynx, more when not swallowing than on empty swallowing*,³.—Spasmodic and cramplike feeling in the pit of the throat or upper part of the œsophagus, like a pressure from below upward or as when swallowing (soon),².—Cramplike, retching sore throat, rather externally in the muscles, on swallowing even drink,¹⁰.—Pressure in the throat,^{31a}.—Constriction and spasm in the throat,⁴⁹.—Feeling of constriction in the throat on swallowing, with desire to swallow frequently,¹.—**Tonsils and Fauces.** Swelling and painfulness of the tonsils, especially on swallowing, she could not even swallow mucus without pain,²¹.—Pressing pain in both tonsils on swallowing, in the evening and through the night,¹.—[490.] Frequent biting scraping posteriorly in the fauces, as in violent coryza,³.—Dryness posteriorly in the fauces, in the morning on waking, and also afterwards, with thirst,⁸.—**Pharynx and Œsophagus.** Pressure from the pharynx down into the abdomen, as if a hard body were opposing from below,¹.—After dinner the food seems to remain sticking in the pharynx,¹.—Acrid rising up into the pharynx after eating sweets, which caused a distressing scraping in the larynx like heartburn,¹.—Scraping rawness in the pharynx, towards evening,¹.—**Sensation of accumulation of mucus posteriorly in the pharynx, with inclination to hawk from time to time*,³.—Sharp jerking tearing extending from the pharynx into the left cervical muscles (fifth day),³.—Constriction and spasm of the œsophagus during

deglutition,⁴¹.—**Deglutition.** Dysphagia,³⁹.—**External Throat.** [500.] Swelling of the submaxillary glands,^{1 39}.

Stomach.—Appetite and Thirst. Ravenous hunger,¹.—**Hunger scarcely to be satisfied*, in the evening,^{3 7}.—Insatiable at noon and in the evening, but after eating a feeling of full distension,¹.—Haste while eating,¹.—**Great greediness* and hasty swallowing,¹.—Insatiability, but no taste to food,¹.—Desire to eat in the pharynx, even after a meal, and after satisfying it an overloaded feeling in the stomach, and pressure in the head,¹.—Dinner is better relished than usual,¹.—Hunger diminished at noon, increased in the afternoon,⁸.—[510.] Appetite small, capricious, and at times even altogether failing,⁵².—The dinner is not relished, with pain in the stomach as from fasting,⁸.—No hunger in the morning (after one hour and a half); in the evening,⁴.—Little appetite during dinner,⁷.—Appetite diminished,²; at noon,⁴.—Aversion to fish, of which he is usually very fond,¹.—*Aversion to real*, which she usually liked, in the evening; the morsels swelled up in her mouth,⁸.—*Disgust for and aversion to the sweetness of sugar*,⁴.—Aversion to meat and to warm cooked food,¹.—Repugnance to food and colicky pains,⁴².—[520.] Loss of appetite, with the disgust at the sight of food,⁴⁸.—No appetite, and almost no taste,¹.—**Loss of appetite*,^{2 36}, etc.—Almost total anorexia,⁵⁶.—**Anorexia*,^{39 57}.—**Thirst*,^{1 74 28}, etc.—Burning thirst (sixth day),⁷.—Extreme thirst,³⁹.—Thirst in the evening till lying down, with increased warmth of the body,⁸.—*Thirst from the forenoon till evening*, or also from morning till evening,⁸.—[530.] Thirst during dinner or afterwards,⁸.—Thirst in the afternoon, during the menses,⁸.—**Thirst, with heat in the palms, in the afternoon*,⁸.—Increased thirst,⁷⁵.—Increased thirst, with hasty drinking, which was very refreshing,²⁷.—Thirst for beer, in the evening,⁸.—**Eruclations.** **Eruclations*,^{25 27 58}.—Eruclations during breakfast, tasting of it,⁸.—Gaseous eruclations,⁵².—Emission of wind upward, with empty eruclations, with pressure upon the chest, and not without effort,³.—[540.] Empty eruclations (after eight hours),²⁶.—*Frequent empty eruclations*, in the evening or forenoon,^{3 8}.—Eruclations at first empty, afterwards tasting of the fat eaten,⁸.—Frequent loud eruclations, with at times rapid, at times weak slow pulse,⁸.—Bitter eruclations,^{25 27}.—Bitter eruclations of yellow water and bile after eating, followed by some vomiting (third day),²⁸.—Excessive bitterness comes into mouth for only a short time, after supper,¹⁰.—Sweetish eruclations,⁸.—Acid eruclations,⁵².—Sour eruclations after food,¹.—[550.] Sour eruclations and uprisings,⁸.—Sour eruclations after a breakfast of bread and milk,¹.—**Sour empty eruclations*, after drinking, or after dinner,⁸.—At night eruclations of the food eaten at noon,¹.—Eruclations tasting of milk in the afternoon,⁸.—Eruclations tasting of the meat eaten,⁸.—Ineffectual inclination to eructate, followed by empty eruclations, with relief,⁸.—Ineffectual efforts to eructate, with pressure in the middle of the spine,³.—**Hiccough.** Hiccough for half an hour (after four days),¹.—*Hiccough*, also very violent in the evening or after breakfast,⁸.—[560.] Violent hiccough disappearing after eruclations of bile,^{27a}.—Pyrosis,⁵².—**Nausea and Vomiting.** **Nausea*,^{24 27}, etc.—Great nausea,^{27a 49}.—Continual nausea,⁴⁸.—Nausea and retching,¹⁷.—Nausea, eruclations, salivation,¹⁷.—Nausea and colic,¹⁷.—Nausea and perspiration,¹⁷.—Nausea for half an hour, after the midday nap; is obliged to spit much; for an hour,¹.—[570.] Nausea in the stomach, with trembling and weariness of the whole body,⁸.—Nausea in the morning, as after an emetic,⁷.—Nausea during breakfast,⁸.—Nausea and inclination to vomit through the day,²⁹.—Nausea, so that he was obliged to sit down,

would vomit, but could not, with eructations and desire for stool,^{31a}.—Nausea, even to vomiting, soon; followed after an hour by vomiting of water and some mucus,²⁹.—Nausea, with inclination to vomit,³¹.—Nausea, with general sick feeling in the head and chest,³².—Nausea, with retching and vomiting of bitter slimy liquid, and at last of food, with shocks of coughing, with a feeling of warmth, especially in the abdomen, perspiration, chilliness over the arms, shuddering of the body, empty eructations, hiccough rumbling and griping in the abdomen; nausea, relieved by sitting bent over; on sitting erect, on moving and on pressure on the abdomen the nausea and vomiting immediately returned (after ten minutes, till after three hours and a half),⁴.—***Strong aggravation of the nausea and headache from taking even a small sip of wine, in every case.**⁴⁹.—[580.] Qualmishness in the stomach after breakfast; also after dinner,⁸.—Qualmishness and sickness in the stomach in the morning in bed; disappearing after rising,⁸.—General sick feeling, with nausea,^{32a}.—Sick at stomach, and have a dreadful sensation in my stomach,⁵¹.—Retching,^{32a}.—**Retching of bloody mucus* (after forty days),¹.—Nausea and vomiting,³⁷.—Nausea and vomiting occasionally,⁵⁷.—Great inclination to vomit, after supper (after eight hours),²⁶.—**Vomiting*,^{15 17 18}, etc. — [590.] Vomiting of mucus,¹⁶.—Vomiting, first mucus, then bile,⁸.—Bilious vomiting,^{32 47}.—Vomiting of bitter yellow, bilious water,²⁵.—Easy vomiting of watery bile, followed by great relief,²⁷.—Violent bilious vomiting,^{27a 58}.—The vomited matters were bilious, and he rejected almost all food immediately after swallowing it,⁴⁹.—While drinking, vomited so that the whole mouth became filled; with it the cheeks were filled out and distended, without nausea; he went to the door and vomited twice; the ejecta, consisting of the contents of the stomach, were somewhat acrid, and caused burning on the face where they touched it; the throat was raw for a long time afterwards,^{31a}.—Vomitings almost continuous, returning regularly three or four times a day; the matter vomited, the daily quantity of which varied from 600 to 2000 grams, gave an acid reaction and a smell of rancid oil. Besides the remains of the food the presence of products of fermentation was proved, such as butyric acid and lactic acid, the existence of a large number of sarcine and cryptogams. The gas from the eructations burned in daylight with a pale flame, scarcely visible, indicating the presence of hydrogen,⁵².—Unfitted for every work (after vomiting), he feels best when lying with the eyes closed,⁸.—**Stomach.** [600.] Disgust, distension, and qualmishness in the stomach, after dinner and supper, with inclination to eructate, disappearing after emission of flatus,⁸.—The stomach was considerably dilated as far down as the navel, its peristaltic movement being at times very appreciable through the abdominal wall; the pylorus, hypertrophied, sunken, and movable, formed a tumor sensible to the touch, sometimes to the right, sometimes to the left of the umbilicus. At last under the right false ribs another hard tumor was found, slightly indented, not well defined, but painful when pressed, and which gave rise to the idea that a new growth depended from the liver; but repeated examinations showed that its size was very variable; that prolonged pressure of the fingers caused its gradual disappearance, and that it was most evident during the violent gastric crisis from which the patient suffered; it was caused purely by the contractions of the hypertrophied muscle, on the right side, resting upon a solid surface formed by the increased mass of the liver,⁵².—Gurgling and rumbling in the stomach while yawning, at noon, also in the evening,⁸.—Moving about in the stomach, with a feeling of coldness, at noon,⁸.—Fulness of the stomach,

with heaving,^{32a}.—Fulness and pressure in the epigastric region,³¹.—Disagreeable feeling of emptiness in the stomach and abdomen, with hunger two hours after dinner,².—Feeling of uneasiness in the stomach, with shuddering of the body on washing and while sitting down, after stooping,⁴.—Slight tenderness to pressure over stomach,⁴⁹.—Deathly sinking at the stomach for hours after eating anything acid,⁴⁹.—[610.] Digestion difficult,⁷.—Discomfort after a meal,³¹.—Disagreeable feeling in the cardiac orifice of the stomach, and extending somewhat upward along the œsophagus,⁶.—**Burning in the stomach* (after three days),^{23 27a}.—**Burning in the epigastric region*,²⁵.—Burning in the stomach, with qualmish eructations, an hour and a half after a moderate dinner,³.—Burning in the upper part of the stomach, when fasting,³.—Heavy pains in stomach,⁴¹.—Dull pain in epigastrium, and on right side of umbilicus,³².—Pain in the stomach,^{27 34}.—[620.] Stomachache, as from emptiness, with nausea,⁸.—Pain about the stomach and in the abdomen, in the morning,¹.—Pain in the pit of the stomach, with burning soreness on pressure, in the evening,⁸.—Pain in the pit of the stomach during inspiration; the breath was held back, after dinner,⁸.—Excitement and spasmodic pressure cause pain in the *epigastric region*,³².—Pain, as if the stomach were compressed, in the morning, fasting,¹.—Cramplike pain in the pit of the stomach,^{32a}.—Cramplike dragging in the pit of the stomach and epigastric region,^{32a}.—Sharp pains in the stomach, and pit of the stomach,.—Oppression and pain in stomach,³⁶.—Oppression in the pit of the stomach,³.—[630.] During the menses sudden tightness and oppression of the epigastric region, so that everything must be loosened,¹.—Pressure in the stomach,^{27 28 30}.—³ *Pressure in the pit of the stomach*,³.—Pressure and pain in the stomach,³⁷.—Pressure in epigastrium for several days,⁵⁹.—Pressure in the stomach after eating, in the evening,^{27a}.—Slight pressure in the stomach (after 3 grs.),²⁶.—Pressure in the stomach, afterwards sticking in the præcordial region, in the morning after rising,⁸.—Pressure and a feeling of coldness in the stomach, at noon,⁸.—Violent pressure in the stomach,³³.—[640.] Violent pressure in the stomach, and pain in the abdomen (after three days),¹⁵.—Spasmodic pressure in the pit of the stomach, and in the stomach,^{32a}.—Persistent spasmodic pressure in the pit of the stomach,^{32a}.—Pressing, cramplike pain in the pit of the stomach and epigastric region,³².—Gripping deep in the region of the pit of the stomach, aggravated by deep breathing (after one hour),¹¹.—Constriction from both sides of the stomach, with anxiety and increased warmth in the head and over the whole body,⁸.—Screwing-together sensation in the pit of the stomach,⁸.—Frequent pinching in the pit of the stomach,³.—Drawing in and beneath the pit of the stomach (first and second days),⁷.—*Stitches from both sides of the stomach towards each other*, with at the same time a stitch in the middle of the sternum,⁸.—[650.] *Tearing and sharp sticking in and beneath the pit of the stomach*, frequently repeated,³.—Throbbing beneath the pit of the stomach, as if in the skin of the abdomen, like a pulsation or the movement of a worm,⁸.—Seems to promote acidity of the stomach,¹.

Abdomen.—*Hypochondria.* Liver voluminous,⁶².—At first a sensation of heaviness and pain in the hypochondria and loins, followed by prostration,³⁸.—Feeling of a heavy weight in both hypochondria (after seven days),²³.—**Cramplike pains in the hypochondria alternating with oppression of the chest and difficult breathing*,¹¹.—Pinching gripping pressure upon a small spot in the hepatic region,³.—Pinching pressure in the hepatic region,³.—Pressure upon the left hypochondrium,³.—[660.] *Pressing pinching in the left hypochondrium* (splenic region), at intervals,³.—Pressure in a small spot in the right hypochondrium,³.—Pressure with stitches, in the

left hypochondrium.¹⁰—Jerklike tearing-drawing and pressure in the right hypochondrium.³—Intermittent tearing in the hepatic region.³—Sharp jerking stitches in the hepatic region after supper.³—Pinching in the right hypochondrium and right side of the abdomen, as from incarcerated flatus, aggravated by motion.³—**Sticking in the right hypochondrium at various times, sometimes also in the region of the hip, violent, even to crying out, or with burning or biting externally; at times also in the evening or after dinner.*⁸—Sticking in the right hypochondriac region during sour eructations and on inspiration.⁸—Sticking in the right side and middle of the hepatic region.²⁹—[670.] Sticking in the hepatic region and right hip.³—*Dull sticking in the region of the spleen.*³—Stitches in the left hypochondrium, also in the evening, while walking and standing.³—Pressing sticking deep in the region of the spleen, aggravated by pressure on the spot.³—Stitches in the left hypochondrium (splenic region).³—Slow pulsating sore feeling in the left hypochondrium.³—**Umbilicus and Sides.** Tense sensation above the navel, with a feeling of qualmishness in the pit of the stomach.²—Colic below the navel, tearing from one side to the other, lasting till evening.²⁹—A pressing griping below the navel, as from flatus, while walking.¹—**Colic about the navel.*^{32a}—[680.] Dull colic above and below the navel.³²—*Dull pressure on a small spot beneath the navel, as from an internal induration,* aggravated by external pressure and by drawing in the abdomen.³—Sharp pressure between the pit of the stomach and the navel, especially aggravated by drawing in the abdomen, but relieved by the eructations caused thereby.³—Tearing stitches in the umbilical region (eighth day).⁷—*Sticking griping in the umbilical region.*³—Cutting stitch transversely across the umbilical region.³—Tensive colic in the left side of the abdomen, relieved by eructations (first day).³—Tension in both sides of the abdomen (first day).³—**Hard pressure, as from flatulence, in the sides of the abdomen, hypochondria, and back, even in the morning in bed,* aggravated by walking, without emission of flatus; only somewhat relieved after a stool, and again renewed on moving about when walking; many days in succession (after two days).¹—Pressure in the right side of the abdomen, close to the hip (ninth day).³—[690.] Dull stitches from an internal ulcer on a small spot in the right side above the navel, aggravated by touch and motion (fifth and ninth days).³—Some stitches in the right side of the abdomen.¹—Sudden violent stitches in the left side of the abdomen, aggravated by breathing and by pressure.¹—**General Abdomen.** **Distension of the abdomen.*^{31a}—**Great fulness and distension of the abdomen, immediately or soon after eating.*¹—**Great distension of the abdomen, in the evening,* on going to bed without supper (after two days).¹—Abdomen tumid.⁴²—Rumbling in the intestines.³³—Rumbling and gurgling in the intestines.^{32a}—Rumbling and gurgling in the whole abdomen, followed by painful retraction, with a feeling as though a stool would occur.⁸—[700.] **Rumbling and rolling in the abdomen, in the morning (after two days).*^{2, 6}—**Movements and rumbling in the abdomen, with frequent emission of flatus, especially in the evening,* or with cutting in the lower abdomen after dinner.⁸—**Loud gurgling in the abdomen, violent and frequent, without pain (after twelve hours).*¹—**Frequent and violent rumbling in the abdomen.*¹—Frequent gurgling in the upper and lower abdomen (seventh, ninth, and tenth days).³—Frequent rumbling in the left side of the abdomen, in the evening.⁸—Much rumbling in the abdomen, in the morning.³—Violent fermenting rumbling, then croaking in the right side of the abdomen.⁴—Offensive flatus.¹—Emission of much flatus.²²—[710.] Frequent emission

of flatus (first day),².—Hot, very offensive flatus passes frequently after dinner till night,⁸.—She suffers greatly from flatulence,¹.—Much flatus in the abdomen, which is not passed; afterwards a pressing flatulent colic soon after dinner, very much aggravated by movement and by walking,¹.—Accumulation and incarceration of flatus in the abdomen, more in the lower abdomen, and pressing flatulent colic, in the evening (after twelve hours),¹.—Accumulation of flatus in the abdomen, which presses out the hemorrhoids, which are then very painful, especially when lying down (after a few hours),¹.—Movement of flatus in the abdomen,¹¹.—**Incarcerated flatus, in the morning in bed, painful like colic, with loud rumbling and grumbling in the abdomen (after four days)*,¹.—**Frequent emission of hot flatus, both loud and soft, in the evening*,¹⁸.—Frequent emission of noisy, offensive flatus, in the evening, without flatulent troubles in the abdomen, several evenings in succession; the first emissions were without odor,².—[720.] Uneasiness in the abdomen, without pain, but very disagreeable,¹.—Violent pain in the abdomen, head, and eyes, in the evening on lying down,¹.—Colic,³⁶.—Dull colic,¹.—Colic after a copious stool,¹.—Colicky pains and repugnance to food,⁴².—Colic, as if diarrhœa would come on,¹.—Colic with every stool, and emission of flatus (after six days),¹.—**Colic, griping-tearing pain in the upper abdomen, in the side of the chest, immediately after dinner; which increases while walking and standing until it becomes intolerable, relieved by perfect rest of body and mind, without symptoms of flatus*,²².—Severe colic, which persisted and increased in intensity so much that he rolled on the floor (after ten days),⁴⁰.—[730.] Rachialgia in an aggravated form, so that she was confined to her bed for about a month on account of the exhaustion produced by want of sleep and almost total anorexia,⁵⁶.—Constrictive colic takes away the breath,¹⁰.—Violent colic constricts the whole abdomen, even while lying down after midnight, still more on rising (after five days),¹.—Awoke at night with colic, followed by thick leucorrhœa,⁸.—From the commencement of their work, he and his comrades experienced colic and a repugnance to food, and the wine and brandy which they took to excite their appetites were disgusting to them, and did not remove the clammy taste which they had constantly in their mouth,⁴⁰.—Violent colic, at times with nausea and running of water from the mouth, often accompanied by offensive mucus, which took away her appetite,¹.—Griping in the abdomen,^{25 26}, etc.—Slight griping, here and there, in the abdomen,⁴.—Griping in the upper abdomen, during dinner,¹.—Griping mostly in the upper abdomen after soup,¹.—[740.] Griping in the abdomen, as far as the stomach, where it is a constriction, she is obliged to bend up, in the evening,⁸.—Griping in the upper abdomen, with profuse emission of flatus, and with itching over the hips, in the evening,⁸.—**Griping in the abdomen (also in the sides of the abdomen and about the navel) at various times, sometimes when yawning, or after breakfast, or with cutting pain after dinner*,⁸.—A tensive griping in the abdomen, followed by dull sticking towards the pit of the stomach, noticed on a jar or on retracting the abdomen,³.—Griping or cutting in the abdomen on different days, sometimes in the morning, often followed by soft or diarrhœa-like stools,⁸.—A good deal of griping pain at times in the abdomen, with tendency to diarrhœa,⁵⁷.—Very violent griping in the anterior portion of the abdomen, with emission of flatus, in the evening,⁸.—Twisting pain in the abdomen before the emission of flatus, in the morning in bed,¹⁰.—Pains in the abdomen,^{33 34 51}.—Pains in the diaphragm and between the shoulders, extending to the sacrum,^{27a}.—[750.] Fulness in the abdomen, immediately after eating, as

if filled with flatus (after twenty-four hours),¹.—Heaviness in the abdomen,¹.—Pressure in the whole abdomen (fourth day),³.—Pressing colic, as from flatulence,³.—Pressure in the middle of the abdomen, soon after a moderate supper,³.—Pressure in the abdomen, which is distended (usually not so), towards evening, with emission of much odorless flatus,³.—**Pressure in the abdomen, with much tympanitis, after a light meal* (second day),³.—**Pressure and gurgling in the upper abdomen after eating*,³.—Pressure in the abdomen and distension, extending from the pit of the stomach to below the navel, with sensitiveness of the right upper lid,³.—Compression in the abdomen, that appears after dinner and supper, changes to a sticking while walking, as from flatus, and is at last relieved by emission of flatus,³.—[760.] Cramplike drawing in the middle of abdomen, with dull colic,^{32a}.—Dragging pains and rumbling in the abdomen,^{32a}.—Acute drawing and crawling from the abdomen into the urethra,³.—*Severe stabbing pains in the abdomen*, without diarrhoea or constipation, continuing several hours, and returning periodically every seven days, or once in three weeks,⁴⁹.—Cutting in the upper abdomen,³.—Cutting in the upper abdomen, while eating,⁸.—Cutting in the whole abdomen, from evening after lying down till morning,⁸.—Cutting transversely through the abdomen, below the navel,³.—Violent cutting in the whole abdomen after milk, with rumbling and frequent emission of flatus,⁸.—Biting in the whole upper abdomen,⁸.—[770.] Flatus causes biting pain in the abdomen extending up towards the chest,³².—Sticking in the diaphragm (after eight hours),²⁶.—Stitches in the abdomen, with distension,¹.—Sticking pain in the abdomen after a natural stool (after five days),¹.—Sharp sticking in the abdomen as if the intestines were pierced with fine needles, at intervals,⁷.—Sticking pains in the diaphragm and between the shoulders,^{21a}.—Burning stitches in the abdomen (eighth day),³.—Feeling of coldness within the abdomen,²².—***Hypogastrium and Iliac Region.*** Occasional fleeting pain in hypogastrium on rising,⁴⁸.—Pressure in the lower abdomen after a dry stool,³.—[780.] Pressure in the lower abdomen, followed by a natural stool, with cessation of the pain,⁸.—Pressing feeling low down in the lower abdomen, with crawling, extending to the beginning of the urethra,³.—**Pressure and aching in the pubic region*, for four days (after twenty-four hours),¹¹.—Constrictive pain in the left side of the lower abdomen, on walking and on pressure; disappears while sitting, after dinner,⁸.—Bruised sensation in the right side of the lower abdomen, as if a spot there were diseased,².—Dull tearing low down in the right lower abdomen extending into the groin (seventh and eighth days),³.—Dull tearing deep in the left side of the lower abdomen, beginning in the region of the hip,³.—Sharp cutting stitch in the left lower abdomen, immediately after emission of flatus,³.—Stitches in the left side of the lower abdomen,⁸.—Stitches as from needles, in the lower abdomen,³.—[790.] Violent penetrating stitch through the right ilium, from above downward, on bending the body over, with a hard abdomen,⁸.—Protrusion of an inguinal hernia (after thirty-seven days),¹.—A hernia presses downward forcibly (after five days),¹.—Feeling as though an inguinal gland were swollen,¹⁰.—Jerking from the groin toward the penis,¹⁰.—Painful retching in the left groin as if a hernia would occur,⁵.—Screwing together sensation in the left inguinal region, extending up into the chest,⁵.—Jerking pressure in the right inguinal region,³.—Pressing pain in the left groin, near the left side of the navel, in the left chest, and left side of the head (third day),¹.—Sticking pressure somewhat above the inguinal region,².—[800.] Violent pinching in the right groin and inguinal region, as in re-

tention of urine, during rest and motion, and renewed on rising from a seat.⁸—Drawing pain in the left inguinal region, while sitting.²—Frequent drawing in the left inguinal region (first days).¹¹—Drawing and pressure in the groin and pubic region, many days in succession.¹¹—Prickling alternating with drawing, in the left groin, at night, disturbing sleep (first night).¹¹—Stitches in the left groin,⁹ in the morning after waking.⁸

Rectum and Anus.—**Rectum.** Heaviness in the rectum while standing, disappearing on emission of flatus.¹—Soreness in the rectum.¹—Pressing and boring from the rectum into the abdomen, on account of which she could not sit down.¹—The rectum seems pressed by flatus, though none passes.⁷—[810.] A feeling in the rectum as though flatus were pressing against the coccyx, by which it was retained, in the evening.¹—Drawing pain in the rectum, extending into the abdomen (after twenty-four hours).¹—Cutting and smarting in the rectum.¹—Jerking stitches extending from the rectum into the root of the penis.³—Itching in the rectum.¹—Itching in the rectum, he constantly wanted to scratch (after ten days).²³—**Anus.** Protrusion of hæmorrhoids, with smarting pain.¹—Discharge of blood from the anus (tenth day).¹—Jerklike cutting in the anus.³—Tearing in the anus.³—[820.] **Burning in the anus* (eleventh day).¹—**Burning in the anus during a stool*.⁸—Feeling of burning soreness in the anus, in the evening (first day).³—Burning in the anus, immediately after a stool.¹—Burning sticking in the anus, in the evening, while walking.⁴—Sore crawling in the anus.³—Crawling pressure in the anus (sixth day).³—**Crawling, as from worms, in the anus*.³—Crawling stitches in the anus, in the morning.³—Stitches in the anus (tenth day).¹—[830.] Stitches extending into the anus.⁸—A twinging stitch like lightning from the anus into the rectum, causing him to start (after three days).¹—Itching in the anus, in the evening.⁸—Itching in the anus, ending in a dull pain.⁷—Violent itching in the anus for several days (after four days).⁷—Violent itching in the anus and oozing of corrosive moisture.¹—**Violent itching in the anus almost every day*.³—Violent itching in the anus after a soft stool.¹—**Urging.** Desire for stool, with movement in the abdomen (very soon).¹¹—Desire for stool in the morning and after eating.¹—[840.] Ineffectual desire for stool (twentieth day).¹—Frequent ineffectual desire for stool (after two days).¹—Long urging to stool, which at last follows soft, but with great effort.¹—Tenesmus.³⁹

Stool.—**Diarrhœa.** *Diarrhœa*.^{19 24 39}—Profuse evacuations of the bowels.³³—Considerable action of the bowels.⁵²—Offensive diarrhœa, alternating with constipation.⁴⁷—Pasty diarrhœa for several days, without pain, only some straining after the stool, as though more were to pass.¹²—Diarrhœa in the evening, with griping in the abdomen (second day).⁸—[850.] Two diarrhœa-like stools in two hours, followed by leucorrhœa (seventh day).⁸—Involuntary evacuation of a thin stool, in the morning, on waking.¹⁰—*Thin stool*.^{28 55}—Loose stool, with griping and tenesmus in the anus, at night.^{27a}—Two soft stools at night.¹—Thin bilious stool (after four hours); no stool for twenty-four hours.²⁵—Thin bilious stools, followed by great relief.^{27a}—Stool very thin, diarrhœa-like, with emission of much flatus (the second time in the day).⁴—Soft stool after dinner, with cessation of the pains in the abdomen.⁸—Several soft mushy stools a day, enveloped in bright red frothy blood, and preceded by colic (first day).²—[860.] Stool thinner, easier than usual (after six hours).³—*Stool large in size and formed, evacuated only with great effort of the abdominal muscles*.¹⁹—Difficult evacuation of soft stool, with emission of prostatic fluid.¹—The first part of the

stool large and hard, the last part soft, the whole light-colored,¹.—Stool scanty, hard, succeeded by several very small and soft evacuations, in the evening,⁴.—Stool at first solid, then liquid,⁵⁸.—Stool in the morning hard, without pressure; immediately after dinner very soft, accompanied and followed by vertigo and roaring in the head,⁸.—The first part of the stool hard, the last easy and soft (thirteenth day),⁷.—Natural stool, with griping in the abdomen, four times a day (after seven days),²³.—Stool intermits (first day),⁸.—[870.] Stool scanty, tenacious, followed by straining and heat and burning in the anus (tenth day),³.—Stool tenacious, light yellow, with sticking in the anus (twelfth day),³.—**Constipation.** **Constipation* (first days),^{7, 28}, etc.—**Obstinate constipation*,^{39, 42}.—Constipation, but some desire for stool,³.—Habitual constipation continued during six, eight, and ten days,⁵².—No stool for three days after purging (after ten days),²³.—Hard stool, with some blood (after four days),¹.—**Stool dry, unsatisfactory*, only every two or three days (second, fourth, and sixth days),³.—**Stool hard, often crumbling, and in pieces, with pressure and clawing in the anus*,⁸.—[880.] Stool hard, difficult (first days),⁷.—Hard stool, followed by renewed urging,⁸.—**Stool hard, small, rather dry, with much pressure and rumbling in the abdomen, in the evening*,⁴.

Urinary Organs.—Kidneys and Bladder. Pain in the region of both kidneys,⁵⁷.—Sore pain in the region of the left kidney,³.—**Pressure in the region of the left kidney*, at times violent pinching,³.—The region of the left kidney is sensitive to touch,³.—Sharp intermittent tearing in the region of the left kidney,³.—Pinching in the region of the kidneys,³.—Tearing in the region of the right kidney, at times sticking,³.—[890.] *At times cutting tearing, at times drawing pressure in the region of the right kidney*,⁸.—*Sticking pressure in the region of both kidneys*,^{3, 7}.—Stitches in the region of the kidneys, at times extending towards the chest, in the evening or after dinner,⁸.—Dull stitches in the region of the right kidney (ninth day),³.—Stitches in the region of the left kidney at intervals,³.—Sticking and bruised pain in the region of the left kidney, while standing and walking,².—Feeling of cramp in the bladder, preceded by colic,¹⁰.—Pressure upon the bladder but not to urinate,¹.—The urine in the bladder presses her greatly (after four days),¹.—**Urethra.** Flow of blood from the urethra after painful micturition,¹.—[900.] Much blood flows from the urethra,¹.—Profuse emission of prostatic fluid, without apparent cause (after nine days),¹.—Sore pain in the forepart of the urethra, when not urinating,³.—During the menses burning micturition,⁸.—Burning in the urethra, after urinating,¹.—Burning before and during micturition,⁸.—Tearing burning in the urethra (sixth day),¹.—*Very acute drawing in the forepart of the urethra and penis*,³.—Drawing and tearing in the forepart of the urethra,³.—Cutting in the orifice of the urethra, in the evening, while sitting,².—[910.] Biting in the orifice of the urethra, after urinating (third day),³.—Tearing and biting in the forepart of the urethra, when not urinating,³.—Sharp tearing cutting in the middle of the urethra, extending forward (fifth day),³.—Stitches through the urethra,^{3, 28}.—Stitches in the orifice of the urethra (eleventh day),³.—Twinging stitch, like lightning, from before backward, in the urethra (after two days),¹.—Itching in the urethra (after thirty-six hours),¹.—**Micturition and Urine.** Frequent urging to urinate, at night, with scanty discharge,⁸.—Urging to urinate after urinating, every evening on lying down, but only three or four drops pass each time, but without pain,⁵.—Excessive desire to urinate; very much urine is passed,¹.—[920.] Frequent and rather increased micturition of a watery or lemon-

yellow color (first days),¹¹.—Frequent micturition, not very copious, very light-yellow urine, after midnight,³.—At night she was obliged to urinate much, though she had not drunk much (first night),¹.—Involuntary micturition on blowing the nose (after a difficult stool),¹.—Emission of urine very slow and in a thin stream,⁸.—Dribbling discharge of urine in the evening, for three days (after sixteen days),⁸.—Urine seems increased, in the evening,⁸.—Diminished amount of pale urine in the evening and morning (second and third days),⁸.—Urine apparently diminished, after dinner,⁸.—Diminished secretion of urine, approaching at one time entire suppression,⁴⁷.—[930.] Urine dark and turbid,⁴⁶.—Scanty urine, color not unnatural,³¹.—Reddish urine,³.—The urine deposits a flocculent sediment,⁸.—The light orange-yellow urine deposits afterwards a flocculent sediment (third day),¹¹.—Scanty urine, becomes turbid like clay-water (after one hour),⁸.—The very yellow urine deposits white flakes on standing a long time (first day),³.—The yellow urine passed at night deposits a mealy sediment,⁸.—*The urine passed at night is very turbid and muddy in the morning* (after two days and later)³.—The daily quantity of the urine was 550 cc., it was neutral, or even alkaline, containing neither sugar nor albumen; nevertheless appropriate reagents revealed in it the presence of zinc, two and a half months after the patient left off work,⁵².—[840.] The urine, which was dark and somewhat turbid, deposited a large sediment, composed of urate of ammonia, with a few crystals of oxalate of lime and a few cells of renal epithelium; at times a pellicle formed on its surface after standing (*Carbonate of zinc?*). A specimen was examined; color rather dark amber, somewhat turbid, but becomes clearer on boiling; odor after standing from the previous evening (in a corked bottle) sickening and wheylike, causing a suspicion of the presence of sugar; reaction acid, specific gravity 1023, no albumen; sugar distinctly present, though in small quantity, by Moore's and Trommer's tests; deposit, on standing two hours, about one-fifth; composition on microscopic examination, as above stated,⁵⁷.

Sexual Organs.—Male. On evening of first day an excoriation appeared on upper surface of glans penis near the tip, just to left of mesial line, sore to touch; it healed next day, but the scab remains on it till to-day (eighth day),⁵³.—**Strong erections* (tenth day),¹.—Persistent erections, with pain,^{32a}.—Long-lasting, strong erections, with pressure in the abdomen,³.—Penis painfully sensitive when walking, as if the shirt were rough and rubbed it,¹⁰.—Tearing drawing in the root of the penis, preceded by dull sticking in the lower abdomen, near the genitals,³.—Tearing in the tip of the glans penis,³.—Painful jerking in the root of the penis,³.—Dull stitches in the glans penis, coming up from the scrotum,¹.—[950.] Shrivelling of the scrotum (second day),¹¹.—Pain in the right side of the scrotum, especially when touched (third day),¹¹.—A sore sensation on the side of the scrotum and contiguous parts of the thighs,¹.—Drawing pain in the testicles,¹.—**Frequent drawing, extending from the testicles up along the course of the spermatic cord* (second and third days),¹¹.—**Drawing up of the right or left testicle, with some pain and swelling*,¹¹.—Drawing pain in the left, afterwards in the right testicle,¹¹.—A prickling-drawing pain in the testicles, mostly while sitting and stooping, lasting several days,¹¹.—Prickling pressure and drawing in the left testicle, at times extending up along the spermatic cord,¹¹.—Transient pressing stitches in the left testicle during rest,⁵.—[960.] Great irritation in the genitals for coition, but difficult and almost impossible seminal discharge (after forty-eight hours),¹.—The sexual organs and desire are too much excited in the company of women, and the

semen is discharged much too soon,¹⁰.—Emissions without lascivious dreams, two nights in succession (seventh and eighth nights),⁷.—**Female.** Profuse falling of the hair on the genitals,¹.—Varices on the pudenda,¹.—Lochia suppressed and milk diminished,¹.—Pressure on the pudenda and rectum (after thirteen days),¹.—Pressure towards the pudenda, with cutting pain about the navel,⁸.—During the menses sticking biting and itching on the pudenda, with a feeling as if swollen,¹.—Much leucorrhœa (first day),²³.—[970.] Acid leucorrhœa, with burning in the pudenda (after nine days),²³.—Slimy leucorrhœa, with griping in the upper abdomen,⁸.—*Leucorrhœa preceded by cutting colic, with constant yawning,*⁸.—**Leucorrhœa of thick mucus*, lasting three days, especially in the morning and evening, also before and during the menses (eighteenth and nineteenth days),⁸.—Leucorrhœa, especially after every stool,¹.—Leucorrhœa returned for only one day (after fifteen days),¹.—**Discharge of large clots during the menses, mostly when walking,*⁸.—**After the menses, discharge of bloody mucus, which caused itching on the pudenda,*¹.—The menses appeared at the right time, were preceded by violent toothache in a hollow tooth (after seventeen days),²³.—The menses which had been suppressed for three months returned, with alternations of paleness and redness of the face,¹.—[980.] After the menses had remained away for thirty-seven days, they appeared very profusely, especially at night and while walking, with violent cutting and dragging in the abdomen and small of the back (twenty-sixth day),⁸.—**Menses fourteen days too early* (after eighteen days),¹.—Menses about five days too early, more profuse than usual, and lasting three days,⁸.—The menses did not come on at the proper time,⁸.—Menses only three days,⁸.—Termination of the menses prolonged,¹.—**Sexual excitement in a woman*, several times at night, without lascivious dreams (second night),¹.—Irresistible desire for onanism, without lascivious dreams, in a woman (seventh night),¹.

Respiratory Organs.—Accumulation of mucus in the larynx and posterior nares; with obstruction of both nostrils, and with nasal speech,⁴⁷.—Accumulation of mucus, causing tickling in the larynx,³².—[990.] Tickling on the larynx, together with sticking in it (third day),⁷.—Frequent acute tickling in the region of the larynx (third day),⁷.—**Voice.** Weakness of the vocal organs while talking loud,¹.—*Hoarseness*, with burning in the trachea,¹.—Hoarse, as if the chest were filled with mucus,¹.—**Cough and Expectoration.** Cough,³³.—An incessant tendency to cough and spit,³⁹.—**Cough and oppression,*^{36 41}.—**Violent cough,*^{15 35}.—Cough, with stitches in the head,¹.—[1000.] Cough, which does not permit him to sleep the whole night, with sticking in the chest, and slight thirst (after twenty-two days),¹.—Hacking cough, but seldom, with persistent rawness in the throat, in the evening,⁸.—Tickling cough, very fatiguing during the day, worse at night,¹.—Short cough, caused by tickling beneath the sternum (fourth day),³.—**Dry spasmodic cough,*⁴⁶.—Frequent dry hacking cough, without pain,⁸.—Dry cough in the evening, with heaviness on the chest, which disappears after lying down, in the evening,⁸.—Dry cough frequently woke her at night during the menses,⁸.—Dry cough, with violent stitches in the chest, and a feeling as if it would burst; she could only breathe and talk with difficulty (Gr.).†—Suffocative cough; a tickling irritation takes away the breath,¹.—[1010.] Cough and expectoration,³⁹.—Raising a large amount of mucus of a milky color,⁶¹.—Obliged to expectorate all the time, and the mucus has a disagreeable metallic taste,⁵¹.—

† From Hahnemann.

Thick purulent expectoration by coughing day and night (after eighteen days),¹.—Expectoration of tenacious mucus like old catarrh., with cough, and after expectoration a sensation as though it were hollow and cold in the chest,¹.—Bloody expectoration when coughing,¹.—**Bloody expectoration, with dry cough, with burning and sore pain in the chest, morning and evening, always before and during the menses.*³.—Expectoration of bloody mucus by coughing, preceded by stitches in the side (after forty days),¹.—**Respiration.** Respiration and chest are unusually free and easy.⁷.—Respiratory troubles,³⁶.—[1020.] Respiration very heavy and deep,^{32a}.—Respiration is tighter than usual (first day),¹.—Respiration through the nose stopped, as in severe coryza,³².—Respiration through the nose impeded, with apprehension and oppression,^{32a}.—**Respiration oppressed and difficult,*^{32a}.—Difficult respiration, especially in the left lung,³².—For twenty-four hours, severe croupy condition, with symptoms of paralysis of the cervical muscles,⁴⁷.—The workers gradually suffer from asthma and other chest troubles,³⁷.

Chest.—The left lung seems affected,³².—Much mucus is loosened from the chest by hawking,¹.—[1030.] *Roughness and rawness in the chest*, with heat and sweat, at night (after thirteen and fourteen days),¹.—Great anxiety in the chest,²⁰.—*Anxiety in the chest*, which disappears in the evening, with headache (after thirteen days),¹.—Angina,³⁹.—**Oppression of the chest* (first day),^{15, 33}.—*Oppression of the chest*, in the morning,^{7, 11}.—Oppression and pressure upon the chest (after seven hours),².—Oppression of the chest, with cough,^{36, 37}.—Tightness in the chest,³⁵.—Tightness of the chest on walking in the open air, as if constricted by a band transversely across it,².—[1040.] Tightness like a constriction about the chest, with pain in it as if cut to pieces,⁸.—**Tightness of the chest, two evenings in succession, with dull sticking and pressure in the middle of the sternum, with small rapid pulse* (second and third days),².—A feeling of constriction or tightness of the chest,⁴⁴.—Tensive pains in the chest,⁷.—Pressure on the chest,^{75a}.—Pressure in the whole thorax,^{32a}.—Pressure, here and there, upon the chest and back,¹.—Cramplike pressure in the chest and pit of the stomach,^{32a}.—Pressure upon the chest, as from rheumatism and incarcerated flatus,³.—Pressure upon the chest, in the morning, at the right extremity of the left clavicle (tenth day),³.—[1050.] Pressure upon the chest coming up from the pit of the stomach, relieved by eructations (eighth day),³.—Pressure upon the chest, extending into the throat, as if a foreign substance were rising up,⁵.—Frequent pressive pain in the chest (first two days),¹¹.—Pain in the chest as if beaten, while riding in a carriage,¹⁰.—Pain in the chest, especially in the right side, as if the blood were forcing its way into the finest vessels in the lungs,⁶.—Pain in a small spot in the upper part of the chest, as if internally there were a sore bruised spot,²².—Sensation of cramp in the chest, thence it extended to the stomach and abdomen, 7 to 8 p.m. (after fourteen days),²³.—Pinching and twinging pain in the chest, from time to time,¹¹.—Pinching pain in the chest at intervals, with qualmishness, in the morning (second day),¹¹.—Dull tearing pain in the chest, above the pit of the stomach (eighth day),³.—[1060.] Tearing stitches in the chest beneath the axilla, followed by a sore feeling in the part,³.—Dull pressing sticking and tension in the chest beneath the right axilla (seventh and ninth days),³.—Very violent stitches in the chest, when walking in the open air, extending up to the left side of the neck, with very difficult breathing, for several hours,¹.—Sticking in one spot in the chest on deep breathing,⁴.—The chest symptoms are aggravated by motion, when she lifts

or takes hold of anything with the hands.¹—**Front and Sides.** A feeling of weakness and burning in the sternum (after a few hours).¹—Tightness in the middle of the chest, beneath the sternum, in the evening.⁸—Pressure upon the upper part of the sternum, or upon the lower portion of the chest, after eating, for a long time (first and second days).²—Sticking pain on the sternum.¹—Sticking and tightness in the middle of the chest, during and after inspiration.⁸—[1070.] Stitches in the middle of the sternum, at times on stooping, so severe that he cried out, at times followed by painful pressure deep internally, extending up into the throat.⁸—A stitch in the upper part of the sternum, extending into the left lumbar region, with a fear of stooping, in the morning.⁸—Dull stitch beneath the sternum, while eating.²—Pain in the left pectoral muscles, as if beaten or sore.¹—The ribs of the whole left thorax painful and very sensitive to touch.³²—**Burning in the right chest* (second day).^{3,8}—Burning on the right chest, as if in the skin, extending to the back.³—Burning in a small spot on the chest, in the right side, near the pit of the stomach, and also above the left nipple.³—**Burning in the left chest.*³—Tension, bruised pain, and stitches in the whole right side of the chest.⁸—[1080.] Pressure like a rheumatic drawing just beneath the clavicle near the shoulder-joint.³—Intermittent pressing outward and drawing tension, here and there, in the left chest.³—Sharp pressure in the right chest near the axilla.⁸—Pressure in the left side, or here and there over the whole chest.³—Pressure on the left clavicle.⁸—Tension and drawing in the left clavicle.¹—Pressure and sticking in the left side of the chest.^{32a}—Tearing pressure in the lower portion of the left chest.³—Tearing in the right upper ribs, almost in the back.³—Tearing in the right chest (eleventh day).³—[1090.] Tearing in the left chest beneath the axilla.³—Pinching pain in the forepart of the right chest, followed by stitches in the right hypochondrium, extending to the præcordial region, with long-remaining bruised pain in the part.⁸—*Dull stitches in the right side of the chest.*^{1,3}—Stitches in the right side of the chest, at times on turning the body to the right, or after dinner, followed by pressure, or alternating with stitches in the right groin and side of the abdomen.⁸—Constant pressing stitch in the right side of the chest, especially aggravated by violent expiration.³—Sharp stitches deep within the right chest.³—Dull stitches on the right short ribs (seventh day).³—A stitch beneath the right nipple.⁷—Stitches in the left chest, at times very violent.³—Stitches in the side, at night (after eight days).¹—[1100.] Stitches in the region of the left ribs opposite the pit of the stomach, with ulcerative pain when pressed and when not, in the evening.⁸—A stitch in the left side of the chest on moving the arm.⁸—Stitches in the left chest, in the evening while standing, with bruised pain in the spot.²—*Sticking pain in a spot in the left side of the chest as large as a hand, with a feeling as if the part were corroded and bruised.*²—Dull stitches in the upper part of the left chest (fifth and sixth days).³—Stitches beneath the heart, like pleuritic stitches, in the evening.⁷—Sticking in the left thorax, with painful sensation in the left nipple.^{32a}—Violent stitches in the left side, aggravated by breathing, better on stretching out.⁹—Sharp sticking tearing in the left chest (after ten days).³—A very acute stitch in the left clavicle.⁸—[1110.] Painful pulsating throbbing in the left chest, by the axilla, at noon.⁸—**Mammæ.** Feeling of distension in the left mamma.⁸—Left nipple very painful and sensitive.³²—Violent pressing pain in the right mamma.¹—Pressing sore pain about the right nipple.³—Pressure beneath the left nipple (second day).³—Fine sharp drawing about the left nipple,

with sore pain when touched; which soon became pulsating.³—A stitch beneath the right mamma.⁶—Sticking beneath the left breast.⁶—Stitches in the left mamma, dull and painful in the morning.⁸

Heart and Pulse.—*Præcordia.* [1120.] When the second proving occurred, a severe pain in the region of the heart was experienced, with a slight swelling externally, and great tenderness over the cardiac region.⁵⁰—Pressure, spasmodic tensor, and heaviness in the heart.³²—Cramplike feeling in the heart and lungs.^{32a}.—**Tension and stitches in the præcordial region.*⁶—Stitches above the heart, in the evening (twenty-fourth day).⁷—Sharp stitches in the præcordial region, aggravated by violent expiration (ninth day).³—**Heart's Action.** The first cardiac sound was hoarse and rather prolonged.³⁰—Impulse of the heart increased, like palpitation.^{32a}.—**Palpitation.*^{27 31}.—Momentary palpitation (after eight hours).²⁶.—[1130.] Frequent momentary palpitation.¹—Frequently recurring palpitation.^{27a}.—**Frequent palpitation without special anxiety* (after two days).¹—Painful palpitation, and a stitch with every beat of the heart.¹—**Pulse.** *Pulse more rapid* (72, 79, 85) *in the evening*, at times with a feeling of increased warmth.⁸—Pulse tense, accelerated, irregular, hard.³².—Hard pulse.^{24 30}.—Pulse small and hard.^{27 27a}.—Slow pulse, easily compressed under the finger.⁵¹.—Pulse slow, very feeble.⁴².—[1140.] Pulse 40 and intermitting.¹⁸.—Pulse wiry and irregular, averaging 112 per minute.⁴⁷

Neck and Back.—**Neck.** **Stiffness and pain in the cervical and upper dorsal muscles*, in the morning for several days, not during the day.¹¹.—Cramplike stiffness in the left side of the neck (first day).².—***Weariness in the nape of the neck, in the evening while writing.**¹.—Pain in the nape of the neck, as if it could no longer support the head, while sitting and riding.¹.—**Pains as if beaten, and as if wearied by too great effort, in the neck and back.*¹⁰.—**Pain in the cervical muscles, at night, as though the head had been held in an uncomfortable position, even felt during sleep* (sixth, seventh, and eighth days).⁷.—Pain in the side of the neck, extending to the shoulder, with stiffness of the part, several mornings in bed, disappearing during the day.¹¹.—Tension in the left side of the neck.¹.—[1150.] Tension and drawing in the right side of the neck, during rest and motion.⁸.—Tension in the anterior cervical muscles (after half an hour).¹¹.—Pressure as with a finger, on the right side of the neck, while talking.⁸.—A pinching feeling up both sides of the neck, near the trunk.³.—Cramplike drawing down the cervical muscles, while chewing.¹⁰.—Cramplike drawing in the right side of the neck on holding the head erect, as if the neck were stiff.¹¹.—Tearing stitches, which pass into each other, in the neck and chin (sixth day).⁷.—Dull tearing in the right side of the neck posteriorly.³.—*Tearing in the right side of the neck*, posteriorly, and also just below the jaw, and behind and beneath the ear.³.—Tearing in the left side of the neck, extending behind the left ear.³.—[1160.] Frequent violent tearing in the left side of the neck, always disappearing on pressure, in the morning (thirteenth day).⁸.—Sticking tearing, posteriorly and inferiorly, in a small spot in the right side of the neck.².—Stitches in the cervical muscles (seventh day).³.—**Back.** Pain in the back, more while sitting.¹.—Bruised pain in the back, while walking in the open air.¹.—Burning pressure upon the spine, somewhat above the small of the back (fourth day).³.—Burning drawing pain in the back and small of the back during sleep, in the morning, also a sensation of falling asleep in the shoulder-joint, disturbing the sleep, disappearing on waking.¹.—Tensive pressure upon a small spot on the back, by the border of the

right scapula,³.—Tensive, rheumatic-like pain in the spine,³.—**Violent bruised pain in the back, while walking in the open air, with weakness, so that she could scarcely reach the house* (nineteenth day),¹.—[1170.] Pinching and burning pain in small spots in the back,¹.—**Sticking pain in the back and small of the back, while sitting and walking*,¹.—**Dorsal.** Stiffness and pain in the upper dorsal muscles, especially on movement, for four nights in succession, not during the day,¹¹.—Burning tearing between the spine and right scapula (eleventh day),³.—Burning in the left side and left scapula (fifth and eleventh days),³.—Pain between the shoulders,^{28, 30}.—Pain between the shoulders, extending through the small of the back to the sacrum (after eight hours),²⁶.—Pressure in the right side near the middle of the spine,³.—Pressure in the back, beneath the left scapula,¹.—Sharp pressure in the back, close to the right scapula,³.—[1180.] **Pressing tension in the back beneath the right scapula*, extending down the back and towards the axilla,³.—Tensive pain between the shoulders during rest and motion,⁸.—Tensive sensation, as from an adhesive plaster, near the inner margin of the right scapula,³.—Tearing in the right scapula (eleventh day),³.—Dull stitches and pressure on the inner margin of the right scapula,³.—Dull stitches beneath the right scapula (ninth day),³.—Sharp stitches close to the upper part of the right scapula, most acute during eructations, lasting several days,⁷.—Sticking extending from the right scapula to the left,³¹.—A violent stitch in the middle of the spine and in the abdomen, immediately after supper, which disappears during rest,²².—Very violent stitches in the middle of the back, while standing,¹.—[1190.] Constant sticking in the margin of the left scapula, extending towards the axilla, so violent that she started, with rising of heat to the head,⁸.—Stitches beneath the left scapula, extending forward into the left pectoral region,⁸.—A stitch extending into the left scapula,⁸.—Dull jerking sticking just beneath and near the left scapula,³.—Beating, throbbing under the lower third of the left scapula,³¹.—**Lumbar.** Aching in the lumbar region with a feeling of languor,⁵⁰.—Pain in the lumbar region of the spine,³⁷.—Tensive pains, very violent, rheumatic-like, in the lumbar region and upon the shoulders (eighth day),¹.—Pressure upon the lower portion of the spine, above the small of the back,³.—Cracking in the small of the back, while walking,¹.—[1200.] Feeling of weakness in the small of the back, and transient weakness in the lower extremities, on beginning to walk,¹.—**Feeling of weakness in the small of the back, while walking*,¹.—Paralyzed feeling in the small of the back, extending to the hips, and afterwards to the left side,³¹.—Pressing paralytic pain in the small of the back, as if one had been lying in an uncomfortable position, worse on rising from a seat and beginning to walk,¹.—**Pains in the small of the back* (second day),^{27a}.—Pain in the small of the back on turning over in bed at night,³¹.—Pain in the small of the back and loins, on stooping,³¹.—Pain in the small of the back, when walking and sitting down,¹.—**Violent pain in the small of the back, when walking, so that he was frequently obliged to stand still, though it was steadily relieved by continuing to walk*,¹.—Violent pains in the small of the back and abdomen, with stitches in the left side, and drawing pain in the lower extremities (after forty days),¹.—[1210.] Feeling of tension and weakness in the small of the back, while sitting, with tension in the head,¹.—Screwed-in sensation in the small of the back, on rising from a seat, in the evening,⁸.—Drawing burning in the small of the back and back,¹.—Drawing like a painful weakness in the small of the back and spine, while sitting and stooping,⁹.—Violent cutting in the small of the back from the slightest

movement, extending into the calves and feet, so that he could neither walk, stand, nor lie.¹—Dragging pressing, at times pinching pains on the coccyx.¹—Sticking tearing in the sacrum (third and fourth days).³

Extremities.—*Stiffness of the limbs*,^{15 33 35}.—Tetanic stiffness and rigidity of the limbs, with soreness.⁴¹—**Stiffness of the joints, with sharp lacerating pains above the joints, always transverse, not lengthwise the limb*. Pressure on the joints produced soreness and pricking pains, which would last some minutes. Slight stiffness of the knee-joints remained after discontinuing the use of the water.³⁰—[1220.] Trembling of the limbs.^{27a}.—Trembling of the limbs, with twitching of the muscles of the thighs.^{32a}.—Violent trembling of all the limbs.⁹—Sudden general weakness of the limbs at noon, with trembling and feeling of ravenous hunger, more when standing than when sitting (twelfth day).¹¹—Sudden feeling of weakness in the upper and lower extremities, with ravenous hunger.¹—**Weakness and weariness of the limbs*,^{31a 32a}.—**Great weakness in all the limbs*.—Great heaviness of the limbs, while walking in the open air.¹—Aching of the limbs.^{44 51}.—Cramp in the extremities, and especially in the calves of the legs.⁵².—[1230.] Cramp in the upper and lower extremities (after five days).¹—**Bruised feeling in all the limbs and weariness, in the morning, on waking*.¹—Bruised pain in the extremities, especially violent and persistent in the left thigh.^{32a}.—Acute darting pains through all the joints, especially the ankles, knees, and elbows, with numbness of the adjacent parts, and an exhausted paralyzed sensation in the muscles of the upper arms and thighs, worse on the right side.⁴⁹—Drawing in all the limbs (second day).^{27 27a}.—Drawing here and there in the limbs, ending in slow dull stitches.²².—**Very violent drawing tearing in the middle of almost all the bones of the limbs, so that they had no steadiness on account of the pain*.³—**Tearing in the limbs* (third day).²⁸.—Tearing in all the limbs, after physical effort and rapid walking.¹—Tearing in the bones of the left forearm, then in the knee, frequently during rest and motion.⁸.—[1240.] Sticking and tearing in all the limbs, extending into the tips of the fingers, always worse after being heated, while sitting.¹—Piercing sticking in the joints (after seven days).¹—Formication through all the limbs (after eight hours).²⁶.—Here and there oscillatory movements and frequent formication of the limbs.^{27a}.

Superior Extremities.—Prostration of both arms, with tension.^{32a}.—Loss of power in the arm, and pain in the wrist.²².—Twitching of the left arm, in the morning, during sleep.⁸.—Desire to move himself with the arms.¹—Drawing pain extending from the tips of the fingers up both arms (though the passes were downward).²².—Bruised pain in the arm, mostly in the morning and evening.¹.—[1250.] Bruised pain in the left arm, he is unable to raise it on account of pain in the deltoid muscle.¹—Tearing in the arms and hands.¹.—**Shoulder.** Pressure and heaviness on both shoulders, on waking.³².—Bruised pain in the left deltoid muscle.³¹.—Feeling of soreness, as after a bruise, in a small spot in the axilla.³.—Falling-asleep sensation in the shoulder-joint.¹—Rheumatic pains in both deltoid muscles, aggravated by raising the arm.².—Acute rheumatic drawing extending from the top of the shoulder, in the deltoid muscles, down both arms, aggravated by raising the arms (second day).².—Jerking in the right shoulder, followed by bruised pain in the left scapula.⁸.—Tension and tearing in both shoulder-joints.³.—[1260.] Rheumatic tension in the head of the left humerus.³.—Painful tearing in the shoulder.⁸.—Tearing arthritic pain in the shoulder-joint, extending down to the finger.²².—Tearing pain deep in the right shoulder (second day).³.—Tearing on the right shoulder,

with pressure in the middle of the upper arm, disappearing on scratching.⁸
 —Tearing pressure upon the left shoulder, about the beginning of the neck.³
 —Tearing, extending into the axilla, beneath the left arm (fifth day).³—
 Violent tearing in the shoulder-joint upon which she was lying, deep in the
 bone, in the evening, in bed.⁸—Sticking tearing on the top of the right
 shoulder.³—Dull sticking tearing in the right axilla.³—[1270.] Dull
 stitches beneath the right shoulder, after dinner.⁸—Stitches in the left
 shoulder.⁸—Stitches in the left axilla and down on the forepart of the
 chest, arresting the breath, in the evening.⁸—Burning in the left axilla
 (third day).³—**Arm.** Dull pain in the right upper arm (after three
 hours).¹¹—Bruised pain in the bone of the right upper arm.⁸—Drawing
 in the left upper arm close to the elbow.³—Tearing in both upper arms
 close to the elbow.³—Tearing in both upper arms, from the deltoid muscles
 downward (first day).²—Tearing in the anterior surface of the left upper
 arm near the elbow, in the right arm near the shoulder.⁸—[1280.] Intermit-
 tent tearing in the middle of the inner side of the left upper arm.³—*Tear-
 ing in the left upper arm*, near the shoulder.³—Sticking in the right upper
 arm, in the morning, while dressing, unaffected by rest and motion.⁸—Stick-
 ing and burning in the anterior surface of the left upper arm, after dinner.⁸
 —Bubbling in the left upper arm.³—**Elbow.** Constant painful heaviness,
 as if paralyzed, in the bend of the left elbow.³²—Disagreeable jerking in
 the elbow-joint, between the olecranon and inner condyle of the humerus,
 while lying down to sleep at noon.²²—Bruised sensation in the bend of the
 right arm.^{31a}—Rheumatic pressure in the elbows.³—Rheumatic drawing in
 the right elbow.³—[1290.] Tearing in the bends of the elbows.³—*Tearing
 in the right elbow-joint, relieved by rubbing, in the morning*.⁸—Tearing up
 and down in the left elbow, in a spot of a hand's breadth.⁸—Sticking and
 tension in the right elbow-joint, in the evening, while yawning.⁸—**Fore-
 arm.** Bruised pain in the forearm on touch and on turning the arm, at
 times with tearing in the thick portion of it.³—Drawing pain in the fore-
 arm, as if in the bone.⁶—Cramplike drawing in the forearm or in the fin-
 gers.¹—Dull bubbling tearing in the muscles on the inner side of the right
 forearm, not far from the elbow.³—Sharp tearing in the left forearm, mostly
 in the upper part.³—Burning in the forearm above the right wrist, on mov-
 ing the arm.⁸—**Wrist.** [1300.] Tension in the right wrist, as though the
 muscles were too short.¹—Rheumatic tension above the left wrist.³—Draw-
 ing pain in the right wrist, as if sprained.¹⁰—Rheumatic drawing in the
 right wrist.³—Painful drawing and tearing in the right wrist, during rest
 and motion.⁸—Tearing internally in the wrist.³—Tearing in the right
 wrist (third day).³—Tearing in the middle of the right wrist, followed by
 tearing towards the backs of the fingers.⁸—Tearing in the bend of the left
 wrist, with tearing stitches on the back of the left hand.³—Burning pain
 in the right wrist and ball of the hand.¹⁰—**Hand.** [1310.] Trembling of
 the hand.¹⁹—*Trembling of the hands during menses*.⁸—Trembling of the
 hand, more when resting it quietly upon the table than when leaning upon
 the elbow.⁸—*Weakness and trembling of the hands while writing*.¹²—Dur-
 ing the menses weakness of the hands and feet.⁸—Stiffness of the back of
 the hand and a feeling of cramp in the extensor muscles of the thumb,
 while playing the piano (first day).²—Rigidity of the hands, mostly of the
 right hand.⁶—Tension in the metacarpal bone of the little finger, extend-
 ing towards the wrist.¹—*Spasmodic tension of the right hand*; it was quite
 blue, cadaverous, heavy, and insensible, with a small, thready, and scarcely
 perceptible pulse.⁶—The hands are asleep, in the morning, on waking.¹—

[1320.] Pressure on the ball of the left hand,³.—Burning in a small spot in the left hand,¹⁰.—Pinching or bruised sticking in the ball of the left hand, above the little finger, very painful,⁸.—Tearing in the hand, extending from the wrist to the first phalanx of the thumb, while riding in a carriage,⁸.—Sticking tearing in the right hand, in the bend of the wrist, and in the palm near the little finger,³.—Sharp tearing in the right hand, just beneath the joints,³.—Pressing tearing at the root of the hand, in the region of the pisiform bone,³.—Tearing on the back of the right hand, in the fourth and fifth metacarpal bones and in the wrist,³.—Tensive tearing in the right palm,³.—Tearing in the right palm near the fingers, frequently (after five days),³.—[1330.] *Tearing in the back of the left hand*, also at times alternating with tearing on the right hand,³.—Tearing drawing in the palm of the left hand, between the thumb and index finger,³.—Tearing in the metacarpal bones of both index fingers,³.—*Fingers.* Pressing pain in the middle joint of the right index finger, and at intervals in its first phalanx,³.—Jerking in the first joint of the right thumb, without pain,⁸.—**Tearing in the first joints and phalanges of the fingers*,³.—Tearing in the right thumb and above it, and in the two adjacent fingers,⁸.—Tearing beneath the nail of the right thumb,³.—Tearing and painful throbbing in the left thumb, towards the tip, as if in an ulcer, with a falling asleep and numb sensation in it, and with externally perceptible heat,⁸.—Tearing in the tips of the index, middle, and little fingers,³.—[1340.] Tearing drawing in the last phalanges of the left middle and ring fingers,³.—Drawing tearing in the right thumb,⁸.—Jerking tearing, extending from the first finger-joints of the left hand towards the tips, in the evening,⁸.—Sharp sticking tearing in the last joint of the right thumb,³.—Tearing stitches in the fingers,⁷.—Tearing stitches in the middle joints of the three last fingers of both hands,³.—Piercing stitches in the fingers (after six days),¹.—Sharp cutting stitches in the tips of both thumbs (fifth and seventh days),³.—Large needle stitches through the first phalanx of the left thumb, several times,⁸.—Crawling and throbbing frequently in the left thumb, with a feeling of heat in it, without externally perceptible heat,⁸.

Inferior Extremities.—[1350.] The power to use and control the lower extremities continued to embarrass her exceedingly for six weeks,³¹.—Attacks of tremulous weakness in the lower extremities, with great paleness of the face; which disappeared on walking (fifth day),¹.—Weakness of the lower extremities, especially of the calves, as after a long walk, on rising from a seat,⁸.—Paralytic weakness and heaviness of the lower extremities, in the afternoon, on beginning to walk, disappearing on continuing to walk.¹.—Weakness and pain in the lower extremities, so that she could scarcely step, with sensitiveness to every draught through the room, in the evening,⁸.—Weakness of the lower extremities for a long time,³¹.—Feeling of weakness in the left lower extremity in every position, in the evening,⁸.—Heaviness of the lower extremities, immediately.¹.—*Heaviness of the lower extremities*, with tearing in them, so that she could scarcely raise them.¹.—During the menses great heaviness of the lower extremities, with violent drawing about the knees, as though they would be twisted around,¹.—[1360.] Uneasiness in the lower extremities at night, so that he could not keep them still (after ten days),¹.—**Rheumatic drawing in the right lower extremity*,³.—In the morning in bed he cannot allow one lower extremity to be bent on account of discomfort; he is obliged to stretch it out,¹⁰.—Feeling of congestion of blood in the left lower extremity, especially in the leg, frequently,¹¹.—*Hip.* Bruised pain, with pinch-

ing, heat, and burning in the region of the left hip, extending to the middle of the thigh, with weakness of the lower extremity, and persistent sensitiveness in the hip, while walking and standing; the pain disappears while sitting,⁸.—Bruised pain in the hip-joint, as if the flesh were loosened from the bone,¹.—Bruised pain in the gluteal and posterior femoral muscles for two days (fifth and sixth days),¹¹.—Violent pain in the hip-joints, as if beaten; a tension and pain on motion,^{32a}.—The left hip is painful posteriorly,³.—Dull pressure just above the right hip,³.—[1370.] Pressing tearing in the left hip,³.—Drawing tearing and burning posteriorly on the left hip,³.—Tearing anteriorly on the crest of the ilium while sitting,².—**Thigh.** * *Varices on the thigh, extending to the labia*,¹.—Painful sensation of heaviness and lameness in the right thigh while walking,⁵.—Heaviness and paralytic pain in the left femur, above the knee, very violent while walking, standing, and sitting, in the evening,⁸.—Paralytic pain in the right thigh, first in the upper part, then extending down towards the knee, while standing, relieved by sitting, in the evening,⁸.—Bruised pain on the anterior surface of the left thigh, where it is also sore on pressure, lasting a long time,⁶.—Pressing drawing just above the right natis,³.—Pressing drawing on the posterior portion of the thigh, so that he could not sit down; when walking it gradually disappeared,¹.—[1380.] *Rheumatic drawing in the thighs*,³.—Drawing pain in the nates, after drinking wine,³.—Drawing pain in the thighs, from time to time, in the evening (ninth day),¹.—Drawing pain on the inner side of the right thigh,¹¹.—Drawing sore pain on the outer muscles of the thigh,³.—Drawing tearing in the articular extremity of the left thigh, and beneath the hip (fifth day),³.—Dull jerking pain on the inner side of the thigh,¹⁰.—*Tearing in the thighs*, especially in their thick portions, violent and persistent,³.—Tearing just beneath both hips, and posteriorly on the right hip,³.—Tearing on the natis, beneath the left hip,³.—[1390.] Violent tearing on the outer side of the thigh, as if in the bone, extending from the hip down to the middle of the thigh, while sitting,².—Painful tearing in the left thigh, extending upward from the knee to the middle of it,⁶.—Tearing on the inner side of the left thigh, disappearing on motion,⁸.—Tearing stitches in the thigh while walking and lying,¹.—Sticking tearing on the right natis, below the hip,³.—Dull stitches in the middle of the right thigh,³.—Sticking on the posterior surface of the thigh while yawning, in the evening,⁶.—Pulsation in the left natis,^{31a}.—Bubbling in the right natis,³.—**Knee.** Great weakness in the hollows of the knees and in the small of the back, all day, while walking (after two days),².—[1400.] Dull pain in the knee, gradually increasing and decreasing,¹¹.—While walking a feeling of pain in the bend of the thigh, as if the muscles were too short,¹.—Pain in right ligamentum patellæ on pressure or walking, and especially on ascending or descending stairs (when straightening knee on ascending, or bending knee on descending), (second day); ditto, but less (third day),^{3a}.—Pain in joints of knees and ankles, and to this day her right arm gives her annoyance in failing at times to respond to her demands,³¹.—In a dream the knee-joints seem painful and almost immovable, and on waking unusually early they were actually painful, as after great fatigue, though worse during rest than during motion,³.—Violent pains, first in the right, then in the left patella and in the heel, in the evening and night,¹.—Bruised feeling in the knee-joints,^{32a}.—Gnawing and boring in the left knee, with tension in the upper part of the calf; renewed after sitting down,⁸.—Frequent dull boring pain in the knees (second day),¹¹.—Painful boring in the knees, especially in the right, in the

evening,⁸.—[1410.] Painful tension in the hollows of the knees while walking in the open air.¹.—Tension, then burning just beneath the right knee, in the upper part of the tibia.⁸.—Tensive pain in the right knee-joint while walking.³.—Drawing pain in the knee at night.¹.—Rheumatic drawing in the right knee, and downward in the tibia.³.—Tearing and bruised pain in the bends of both knees, worse while walking, better while sitting, in the morning.⁸.—Tearing in the right knee and also on the outer margin of the bend of the knee, extending into the calf.³.—Tearing in the right knee, disappearing on rubbing.⁸.—Tearing on the outer side of the left patella (after three hours).³.—Tearing and gnawing in the left knee, extending upward and downward, very painful.⁸.—[1420.] Tearing and contraction in the left knee, as if in the bone, very painful during rest and motion.⁸.—Tearing in the left knee-joint, or also extending from the knee upward, with bruised pain in the spot.⁸.—Pressing stitch on the inner side of the right knee during rest.³.—Stitches in the knee (after fifteen days).¹.—Stitch like a fleabite on the inner side of the right knee.⁸.—Beating in the knees while sitting, after a short walk.¹.—Frequent crawling in the left knee-joint.³¹.—**Leg.** **Legs œdematous*.⁴².—*(Disappearance of the varices on the leg).⁴.—**Stiffness of the leg, so that he could not walk*.²¹.—[1430.] **Weakness of the leg, worse while walking*.⁸.—Falling asleep of the right leg, as far as the knee, at night.¹.—Tightness and stiffness of the muscles of the calf while walking.².—Tension and pressure in the leg down along the tibia.⁸.—Tensive pain in the left leg.^{32a}.—Tension and drawing in the calves (first day).².—Alternating pressure and drawing in both bones of the right leg.⁶.—Pressure, followed by tearing on the inner side of the left leg, between the ankle and calf (third day).³.—Cramp in the leg in the morning in bed, drawing it up.¹⁰.—Cramp in the calves threatens on turning over.¹⁰.—[1440.] Cramplike pain in the calf and left foot.¹⁰.—Cramplike pain in the left calf at night.¹¹.—Jerking in the left calf.¹¹.—Drawing pain in the legs, in the evening.¹.—Rheumatic drawing and tension in the right tibia.³.—Drawing pain in the right tibia (after five hours).³.—Drawing down both calves.⁸.—Tearing in the right leg, in the forepart, beneath the knee, followed by a bruised pain in the spot.⁸.—Tearing in the left leg, between the tibia and ankle.³.—**Tearing in both calves*.^{13 8}.—[1450.] Tearing in the calf, extending to the malleoli.⁸.—**Tearing downward in the tibia, to the back of the foot*.⁸.—Tearing in the lower end of the right tibia.².—Tearing on the right tibia (fourth day).³.—Sticking pain in both tibia, while walking.¹.—**Piercing stitches in the tibia* (after six days).¹.—***Burning pain on the tibia**.¹.—**Ankle.** **Erysipelatous inflammation and painful swelling of the tendo Achillis*.⁸.—Swelling about the malleoli of a foot formerly diseased.⁴.—Rheumatic tension in the left ankle during rest.³.—[1460.] **Sensation of drawing and contraction in the right tendo Achillis*.⁸.—Pain as if sprained in the ankle.¹.—Pain, as if sprained in the ankle on moving the foot (after four hours).³.—Pressing pain beneath the outer malleolus.¹.—**Drawing tearing about both inner malleoli, and in the tendines Achillis*.².—Tearing pain in the right outer malleolus.⁸.—Tearing beneath the right inner malleolus, extending to the heel, in the evening while sitting.².—Tearing in the bend of the ankle and also on the margin and on the back of the left foot.³.—Tearing in the right outer malleolus, disappearing on rubbing.⁸.—Pulsating tearing in both tendines Achillis.³.—[1470.] Burning beneath the right inner malleolus.³.—**Foot.** Violent inflamed swelling on the foot (after eleven days).¹.—Trembling of the feet.²⁹.—Trembling of the feet on raising them

while sitting, otherwise not,⁸.—Trembling of the feet and difficulty of raising them, with frequent stumbling,⁴⁹.—**Excessive nervous moving of the feet in bed for hours after retiring, and even when asleep,*⁴⁹.—**Great weakness of the feet, in the morning in bed, disappearing after rising and walking about,*⁸.—During the menses weakness of the feet and soft stool, in the evening,⁸.—Burning beneath the right heel, worse when stepping and walking, than while sitting, in the evening,⁸.—Burning and ulcerative pain in both soles, in the morning,⁸.—[1480.] Pain in the outer margin of the foot, as if the bone would break while walking, on raising the foot, also on holding it sideways and resting it upon the tip; otherwise not,⁸.—Pain in the soles on stepping upon them, they seem swollen, with a feeling as if scratched by a toothed instrument, for several days,⁹.—**Intolerable boring pain in the heel after drinking wine,*³.—**Ulcerative pain in both heels, worse when walking than when sitting,*⁸.—Frequent acute falling asleep of the feet towards evening,¹⁰.—Paralyzed feeling in the whole right foot,^{31a}.—Tension in the right foot, downward on the heels, as if the foot had been sprained, or as if the muscles were too short,¹.—Tension in the right sole, as though the tendons were too short, while stepping and walking, in the evening,⁸.—Drawing in the bones of the left foot,^{31a}.—Drawing tearing in the right foot, extending into the malleoli, with a feeling of heaviness during rest,².—[1490.] **Tearing and tension on the margins of the right foot,*³.—Tearing on the outer margin of the right foot towards the toes, disappearing on rubbing,⁸.—Tearing and crawling on the back of the left foot, with a feeling of numbness in the soles, disappearing on walking,⁸.—Tearing and pain in the heels, the feet seem beaten from the body,².—Tearing in both soles,³.—Sticking tearing in the soles, in the bend of the joints of the right little toe,³.—A stitch above the right foot while running,⁸.—Burning stitches in the bone on the back of the foot, here and there,³.—Piercing stitches in the ball of the foot (after six days),¹.—Stitches in the heel,¹.—**Toes.** [1500.] The toes are painful, as if sore, after walking,¹⁰.—*Sprained pain in the bend of the first joint of the toes,*².—Ulcerative pain in the right great toe, in the evening,⁸.—Painlike suppuration in the nail of the great toe when touched,¹.—Feeling as though there were blisters on the toes, as after walking,¹⁰.—Drawing tearing in the toes and forepart of the foot,⁵.—Sticking tearing in all the toes,³.—*Sticking tearing in the first joints of the right great toe,*³.—Tearing-sore pain in the tip of the great toe and beneath the nail (ninth day),³.—Tearing in the lower portion of the two first right toes,³.—[1510.] Sticking tearing in the bends of the first joints of the first two right toes,³.—Tearing in the right great toe, with jerking tearing in the outer side of the left calf,⁸.—Tearing in the right little toe, in the evening,⁸.—Burning and sticking in the ball of the great toe, as though the part had been frozen, during rest,¹.—Prickling stitches in the left great toe (second day),².—Pulsating sticking in the tip of the right great toe (second day),³.—Crawling sticking, as after falling asleep, in the bend of the first joint of the left great toe, on the inner side,³.

Generalities.—Emaciated,¹².—Great emaciation,⁴⁷.—He presented an emaciated feeble appearance, the face wrinkled and bluish,⁴⁸.—[1520.] Paleness of the mucous surfaces, with disappearance of the subcutaneous cellular tissue, and atrophy of the muscular system, much more marked on the right side, in the face as well as in the limbs,⁵².—**Much visible twitching of the body and face (after five days),*¹.—Visible jerking in both arms and hands (after sixteen days),¹.—***Twitching and jerking in various muscles,**¹¹.—**Twitching in various muscles,*¹⁰.—**Muscular twitching, here and*

there, in the body,¹⁰.—Long-continued trembling, as from chilliness, after every slight emotional excitement,³.—Stretching of the body and limbs, with pale, sunken face,⁴.—Great inclination to stretch arms,⁵⁸.—On waking in the morning, for about ten days, there was entire inability to move the head and limbs, with extreme sensibility to contact over the whole surface. After about an hour, this paralytic state improved enough to permit walking, but with a staggering uncertain gait, and a marked tendency to fall to the left side,⁴⁷.—[1530.] Heaviness in the morning,⁵⁰.—**Feeling of heaviness in the body and weariness in the lower extremities, in the morning in bed, as after too heavy sleep,*³.—Dulness like slight nausea, with a tremulous feeling in the chest, headache in the forehead and diminished intellectual power, so that he could not understand what he was reading, two hours after dinner,³.—Is obliged to lie down during the day,¹⁴.—So weary in the morning on waking that he thought he could not rise,².—Weariness, frequent yawning, and great exhaustion in the whole body,⁶.—Tired in the evening,⁵⁸.—**Great weakness* (third day),^{28, 32a}.—General physical weakness for three weeks,¹⁵.—(General weakness, more marked on the right side,⁵².—[1540.] Weak and indolent, especially in the lower extremities, in the morning,⁸.—At first, while walking, increased vigor and great lightness; afterwards great weakness through the whole proving,².—Sudden, faintlike weakness while standing, so that she could scarcely reach a chair,¹.—Body weak and prostrate, frequently, especially after dinner, at times with tremulousness and heaviness of the head⁸.—General debility,⁴¹.—**Prostration,*^{37, 39}, etc.—Prostration of the whole body,^{27a}.—Great prostration and weakness (after twelve hours),²⁵.—General exhaustion all day, sleepiness, aversion to noise, and yet difficult hearing, a dreamy condition, as after a sleepless night, together with shivering and cold creepings, like a cold after perspiration,¹.—Feeling of languor, with aching in the lumbar region,⁵⁵.—[1550.] Lassitude, prostration, and pains in the limbs,⁴².—General lassitude and sensation all over as if beaten,³⁶.—Faintness,⁴⁹.—Faintness, unconsciousness, almost without pulse,²⁰.—Frequent fainting, several times daily, followed by prostration and general numbness,⁴⁹.—Decrease of sensibility to touch; tickling, on the contrary, was more quickly responded to than in the normal state,⁵².—Sensation of swelling,⁴¹.—Sensation of general trembling, without trembling,⁴⁹.—Every slight emotional excitement causes internal trembling,³.—**The pain at times seems to be between the skin and flesh,*⁷.—[1560.] When I lie down I am numb all over; I fear apoplexy,⁶¹.—General internal discomfort,^{32a}.—Painful feeling of the whole body, relieved by rest,^{32a}.—Uncomfortable feeling of pressure and pressing upon the inner walls of the trunk, as though the whole body would be forced asunder, without trace of flatulence, rather caused by the nerves, worse in the right than in the left side,².—Cramplike pain, here and there, in the muscles,¹⁰.—**Jerking through the whole body during sleep, at night, and at noon* (after thirty-two hours, and second day),¹.—Sticking, here and there, in the body, in the evening,⁸.—Sticking cutting pain in the whole right side,⁹.—**Violent throbbing through the whole body,*⁹.—**Wine aggravates nearly all the symptoms, even though they seem to have been relieved by Camphor,*².—[1570.] **Wine and Nuc vom. aggravate and reproduce the symptoms, especially the uneasiness at night, and the constipation,*³.—**Most of the symptoms appear after dinner and towards evening,*².—**Most of the symptoms come on while sitting and during rest, but less during motion and in the open air,*⁸.—Better on awaking,⁴¹.—She feels better in the morning,⁸.

Skin.—Objective. Skin dry,⁴².—A slight injury of the skin bleeds very profusely (after third day),¹.—Large chilblains on the hands which swell and itch violently (after ten days),¹.—The epidermis of the hands cracks from slight cold, becomes fissured and painful,¹.—Roughness of the skin on the back of the right hand, accompanied by very intense irritation when rubbed, that seems to go through the whole body, and by discharging vesicles; it is always worse when he catches cold, and in cold weather,⁴⁵.—[1580.] Small round red spots on the hands and fingers,⁸.—Right hand very much broken out, with well-marked tendency to the formation of painful fissures,⁴⁵.—A red, hard, painful swelling on the left wing of the nose, painful to pressure, lasting three days,⁸.—Pimples on the forehead, back, and third left toe, with sore pressing pain when touched,³.—Papular eruption on the face,¹⁰.—Large, yellowish-white itching pimples on the lower lip,¹.—Papular eruption on the upper lip (after fourteen hours),¹.—Flat red pimples in the middle of the upper lip, in the margin, painful to touch,¹.—Very itching pimples almost in the middle of the chin,¹.—A pimple with ulcerative pain on pressure, on the right side of the neck,⁸.—[1590.] Red pimples on the chest and face,⁴.—A small, red, painfully sore pimple at the root of a hair on the scrotum, lasting three days (after five days),³.—Papular eruption on the forearm, itching violently during the day,¹.—Itching pimple on the back of the hand,¹.—A pimple beneath the skin of the bend of the last joint of the ring finger,⁸.—Small pimples on the thigh, calves, and about the knees, with violent itching, which ceases immediately after scratching,².—A red spot on the leg becomes covered with a scab, with itching,¹.—Clear water-blisters or suppurating pimples on the upper lip,⁸.—Stinging itching in the skin, with nettlerash eruption after rubbing,¹.—Eruption on the face, crust,¹⁶.—[1600.] Small white pimples, with some moisture on the upper lip, chin, and forehead, after moderate wine-drinking,².—Eruption of rash in the bend of the elbow,¹⁰.—Eruption of itching rash in the hollows of the knees and bends of the elbows,¹⁰.—Ulcerative blisters on the back of the right foot, as after a burn (after eight days),¹.—Many small pustules near together beneath the chin, with violent itching (after eight days),¹.—Small pimples, like boils, on both shoulders,³.—Small boils on the back, between the scapulae, and in other parts,¹.—A large boil on the left upper arm (after thirty-one days),¹.—A red, finally a dark-red furuncle, with a hard areola, containing dark-yellow pus, developed on the pubic region, somewhat to the left side,^{31a}.—**Subjective.** Burning on the skin of the right scapula (fifth day),³.—[1610.] Burning on the left forearm, at night (after six days),³.—Burning in the skin on the margin of the right hand (third day),³.—Painful burning cracks between two fingers of the left hand,⁸.—Burning on the flexor surface of the fingers,¹⁰.—Burning in the skin on the lower portion of the right calf,³.—Bunion on the left little toe and ball of the foot, with stinging pain on walking,¹.—Biting and burning pain in an ulcer,¹¹.†—Biting burning posteriorly in the upper part of the skin of the left upper arm (tenth day),³.—Biting on the back of the right hand, extending above the wrist, as if an eruption would appear,³.—General formication, as if covered with ants, relieved only by rubbing,⁴⁹.—[1620.] Crawling in the skin of the whole body,²¹.—Crawling and formication in both calves, extending into the toes, during rest and motion,⁸.—Fine sticking itching over the whole body, with sour sweat,¹⁶.—Sticking, pricking itching, in the evening in bed, on the

† From the external application.

forehead, thigh, malleoli, feet, and other parts of the skin.²—Itching,¹⁷†—Frequent itching of the skin.⁹—Frequent violent itching, as from numerous fleabites, at night, especially on the back and abdomen.³—Itching in almost every part of the skin (even of the face and head), at times with burning, or with redness, or with pimples and eruption after scratching, at times painfully sore to touch.⁸—Itching over the whole body, without eruption (after nine days).¹—Itching as from lice, at night; after scratching it immediately appears in another place.⁸—[1630.] Some itching points in the skin, especially on the hands, without external redness or elevations.⁸—Sudden itching, here and there, especially in the evening in bed, immediately disappearing on touch.¹—Itching on the face, in the evening.¹—Itching on the upper lip, chin, and about the mouth without eruption (after twenty-four hours).¹—Violent itching and redness over the whole protruding portion of the chin (after two days).¹—Itching about the nipples, she constantly wanted to scratch (after four days).²³—Itching spots upon the back, and tetter, painful to touch.¹—Itching between the scapulae, in the evening, with much eruption.¹—Itching on the scrotum, violent, almost sore, not relieved by scratching, several evenings in succession.²—* *Violent itching on all the joints in succession*, at last on the hip-joint.¹⁰—[1640.] Itching on the upper and lower extremities, except on the joints.¹—Itching on the flexor surface of the joints.¹⁰—Sticking itching in a small spot in the left fourth finger, soon followed by a red pustule, with throbbing burning pain.⁵—Violent itching over the whole of the lower extremities.¹—Itching on the anterior part of the thigh, above the knee, five evenings in succession, with pimples which are easily scratched off.²—Itching burning on the outer side of the right thigh, above the knee.³—Itching of the soles of the feet, the calves of the legs, and thighs, almost intolerable at night.⁴⁹—* *Itching of the thighs and hollows of the knees, in the evening*, very violent, with urticaria-like eruption after scratching.²—* *Violent itching on the right knee joint*.¹⁰—Itching on the soles.¹—[1650.] Painful itching on the right sole.⁸—Painful itching, with heat, redness, and swelling on the right toes, as if they had been frozen, in the evening; rubbing and scratching aggravated the pain.¹—Itching of the great toe as if it had been frozen.²²—Violent sticking itching in the anterior ball of the great toe, in the evening.⁸

Sleep.—Sleepiness. Constant yawning.⁹—Frequent yawning, all day (first day).²—Much and frequent yawning, with and without sleepiness, even in the morning or evening.⁸—Yawning and constant inclination to yawn, in the forenoon, after a good night's sleep.³—Feel drowsy most of the time.⁵¹—Sleepiness.⁴²—[1660.] Sleepy, in the morning.⁸—Sleepy and indolent, immediately after dinner.⁸—Sleepiness, with spasmodic dullness of the head, without being able to sleep.¹—Constant desire to sleep, even in the morning; he could scarcely keep awake.⁹—She is unable to keep awake, about 2 p.m., and sleeps at her work; disappearing in the open air.⁸—Falls asleep late in the evening, but sleeps soundly.⁸—Much sleep.¹—Deep, exhausting sleep, with many dreams.⁷—**Sleeplessness.** Sleeplessness.^{15 33 40 58}—Almost total sleeplessness, at night, followed by heaviness, in the morning.⁵⁶—[1670.] Falling asleep prevented by mental activity.¹—Falling asleep late in the evening, but wide awake early in the morning.⁸—Frequent waking at night on account of anxiety.⁸—Woke on back (second night).⁵³—Waking about midnight from vivid dreams, with

† From the application of Zinc flowers to the bare skin.

a feeling of great heat over the whole body, without being warm, without sweat, with a feeling of dryness and without thirst, is obliged to uncover the arms and limbs.²²—She frequently woke during the night, with anxious dreams of water and of drowning (first days),²³—She woke frequently at night, could not sleep after 5 A.M. (first eight days),²³—**Frequently awakened by frightful dreams* (first night),¹—**In spite of great sleepiness he awoke frequently at night, with violent palpitation and screaming, from anxious dreams of thieves*,¹—Frequent waking at night, with difficult falling asleep again; anxious dreams towards morning,¹—[1680.] **Frequent waking, without apparent cause, at night* (after five days),^{1, 8}—In the evening, mind very active, which prevents his falling asleep early (eighth day),¹—Night restless,^{26, 27}—Sleep very restless, full of dreams,^{27a}—Sleep restless, with dreams of fire, of fleeing, etc., followed by perspiration,³⁰—Night restless, talking in sleep, waking after midnight and perspiring profusely,²²—Restless night; he awoke screaming, as if delirious, as if geese were biting him,¹—Restless sleep, she could sleep only a little at night, but slept long in the morning,⁸—Slept badly, and was often disturbed by violent headache and painful cramps in the calves of the legs,⁵²—Sleep agitated and unrefreshing, with occasional nightly perspiration,⁴⁷—[1690.] Uneasy sleep, with anxious dreams (fourth and thirty-third nights),¹—Uneasy sleep, with many vivid dreams; a feeling of weariness, in the morning on waking,³—Uneasiness during sleep, after midnight; he awoke much too early, with great weariness, and a feeling as though the eyes lay deep in the head,³—Sleep at night frequently interrupted; the night seems very long,¹¹—Very uneasy sleep, with frightful dreams,¹—Very restless sleep, full of fantasies and thoughts, upon which he was obliged to reflect (first night),¹—**Starting from the night's sleep with involuntary jerking in the left lower extremity* (fifth day),³—In the evening, immediately after lying down, she rises up in bed, talks unintelligibly, with short tremulous respiration,¹—**Unconscious starting during the night's sleep, during the menses*,⁸—**Loud screaming out at night in sleep, without knowing it*,⁸—**Dreams.** [1700.] Sleep with many vivid dreams,³²—Much dreaming, with mental excitement, and talking about midnight about his dreams,²²—He dreamed all night, woke many times, and was very weary in the morning,³—Vivid dreams made the night's sleep restless,¹—Vivid dreams after midnight, so that even in the morning they were before his eyes,³—Sad dreams (second night),⁵³—Anxious dreams,¹—Heavy anxious dreams (after three days),²³—Anxious dreams, the anxiety of which continued after waking,¹—Dream as though she were being strangled, and in the morning after waking fear lest a man who strangled her would return,¹—[1710.] Dreams of corpses and horses, which changed into dogs under him,²—Disgusting dream of being smeared with human excrement (after two days),²—Vexatious, or quarrelsome or sad dreams,⁸—Reveries during sleep,¹—Nightmare,⁴¹

Fever.—Chilliness. Chilliness, with nausea,^{32a}—Febrile chill over the whole body,^{32a}—Chilliness and coldness of the whole body,^{32a}—Rigors, trembling of the limbs,⁴¹—During the menses, chilliness all day,⁸—[1720.] Chill after dinner, lasting till evening,⁸—Chilliness on waking, in the morning, in bed,¹⁰—Chilliness in the forenoon; frequent rising of heat, with redness of the face, in the afternoon,⁸—Shaking chill, from 4 to 8 P.M., on lying down, without subsequent heat, sweat, or thirst; even in bed she was unable to get warm for a long time; yet the sleep was sound,⁸—Chilliness for a quarter of an hour, while writing, with a sensation as though a foreign stony hard substance were in the throat, with constant

yawning.⁸—Constant chilliness, with increased internal warmth.⁶—Chill, which disappears in the house, creeps over her immediately on going into the open air.⁸—Chilliness, followed by febrile symptoms, over the whole body, with chilly creeping and drawing through the whole back.³²—Constant chilly feeling, with general sick feeling.³²—Violent chill, lasting till evening (after one hour), followed by nausea, eructations, and accumulation of sour water.²⁹—[1730.] *Shaking chill in the evening*, on taking hold of anything cold; also shaking chill by itself, so that she was obliged to lie down, after which it disappeared.⁸—Shaking chill, with pale sunken face, weak, rapid, and irregular pulse, often with nausea and vomiting; at last the pulse became large and full, with general heat, red face, skin swollen, followed by very restless sleep, with distressing dreams and exhaustion, followed at last by copious sweat; the whole attack usually lasted from eight to ten hours, generally began at the end of a day's work, continued through the night, and ceased in the morning, so that the man was able to return to work.³⁸—Creeping chills over the whole upper and lower part of the body.^{32a}—Great sensitiveness to cold, especially in the tips of the fingers and in the feet.¹—Shivering.^{37, 39}—Sensitiveness to the open air, in the afternoon and evening.¹—Severe shiverings.⁵²—Violent shivering, with intense headache.⁴²—Shivering, with shuddering nausea.^{32a}—Shivering, continuing for two or three hours, and followed by cold sweats, or more frequently the sweating is preceded by flushes of heat and violent febrile reaction.³⁶—[1740.] Shivering discomfort, like a premonition of a storm.¹—Shivering from a penetrating wind, not from cold.¹—In the evening shivering, sometimes succeeded by an indistinct hot stage, but always by profuse sweating.⁴⁴—Shivering in the evening, so that he could not get warm in bed for a long time.⁸—Shivering in the open air, which disappears in the house, in the evening.⁸—Temperature in the morning 96.8°, in the evening 91.9°.⁵²—External parts are easily frozen in slight cold (lobules of the ears, tips of the nose, etc.).¹—Cold nose.⁸—**Frequent febrile shivering down the back*, for five days (after three days).¹—Creeping chills over the upper and lower abdomen.^{32a}—[1750.] Shivering on the scrotum, with shrivelling of it.¹¹—Shivering as in gooseflesh in the scrotum and neighboring parts.⁴¹—**Coldness of the extremities*.^{32a, 42}—Hands and feet cold.^{27a}—Hands cool (after eight hours).²—Awakened at night by coldness of the feet (after thirty-six hours).¹—Cold feet in the evening, lasting a long time, in bed (eleventh day).¹—**Heat.** Fever.³³—Febrile paroxysms several times a day, recurring in the forenoon and afterwards; chilliness and shivering, flushes of heat over the whole body, *violent trembling of all the limbs*, extreme sickness, even to faintness, qualmish taste, with loathing of the morsels of food in the mouth, feeling of emptiness in the stomach, *violent throbbing through the whole body, with short, hot breath*, with very dry mouth, hot, dry hands.²—Fever, followed by perspiration.⁴²—[1760.] Febrile flushes, with sudden crying out to be fanned, and thirst.⁴⁷—Heat.³⁰—Flushes of heat (after half an hour).²⁴—Feeling of heat in the whole body, especially in the back, where she thought that she would perspire; not of the feet.⁸—Heat of the whole body, especially of the head, with redness of the cheeks, without external heat.⁸—Feeling of heat, with coldness of the forehead, in the evening.⁸—Heat and thirst, with cold skin, over almost the whole body, in the evening.⁸—Almost burning heat in various small places, while sitting, for example, between the thigh and abdomen, on the sides of the lower abdomen, etc.³—Heat in the evening, after lying down, with anxiety all night.⁸—Increased warmth of the whole body, with sweat

in the axillæ,⁸.—[1770.] Increased internal warmth, not perceptible externally, in the evening after 6 o'clock,⁸.—Increased warmth coming on soon in the company of others,^{31a}.—Increased warmth of the whole body, only a feeling of coldness in the abdomen, in the evening,⁸.—Aagreeable warmth, with slight perspiration over the whole body, in the afternoon,⁸.—Increased warmth of the whole body, except of the feet, as if sweat would breakout, in the afternoon,⁸.—Heat in the head, in the evening, and after two hours chilliness,¹.—Heat in the head in the evening, with redness and increased warmth in the cheeks,⁸.—Feeling of heat in the head, with redness of the face,⁸.—Violent heat in the head, so that the eyes burned, three evenings in succession (after ten hours),¹.—Heat of the face, without headache, with cold body, all the forenoon,¹.—[1780.] Heat of the fingers, immediately followed by heat about the throat and in the face, with redness of the face, soon followed by a sensation of coldness in the nape of the neck,²².—Burning and heat in the soles, in the evening,⁸.—**Sweat.** Moist surface,⁵¹.—Very profuse sweat,¹⁹.—Profuse perspiration, while walking, in the open air (after nineteen days),¹.—Perspiration towards morning, followed by gradual disappearance of the symptoms,²⁶.—Increased perspiration during sleep, towards morning (second day),²⁷.—General perspiration towards morning,²⁸.—General perspiration, with disappearance of all symptoms (fourth day),²⁸.—Cold sweat, often preceded by great heat,³⁷⁴¹.—[1790.] Cold sweat, preceded by flushes of heat,⁴¹.—Perspired easily on the head and hands,^{31a}.—Nightsweat,¹⁷.—Profuse nightsweat (after thirty-three days),¹.—Nightsweat over the whole body, especially on the lower extremities, several nights in succession (after three days),¹.—*Nightsweat all night*, with heat, cannot tolerate any covering,⁸.—Sour sweat, with fine sticking itching over the whole body,¹⁶.—Sour-smelling sweat,¹.—Hands very sweaty,¹.—² *Profuse sweat on the feet*, of a bad odor; he walks the feet sore,¹.

Conditions.—Aggravation.—(*Morning*), Morose; gloomy; pressive headache in forehead; burning in eyes; on waking, lachrymation, bitter, slimy taste; stiffness and pain in cervical muscles; bruised pain in arm; pressure and heaviness in shoulders; in bed, weakness of feet.—(*Noon*), Pressure at root of nose.—(*Afternoon*), Morose; fretful.—(*Toward evening*), Most symptoms.—(*Evening*), Morose; gloomy; pain in eyes; burning in eyes; pressure in eye; sticking in left lower molar; emission of offensive flatus; after lying down, urging to urinate; bruised pain in arm; itching; shaking chill; heat.—(*Night*), Headache; pain in eyes; roaring in right ear; tickling cough; stiffness and pain in upper dorsal muscles; drawing pain in knees; itching; sweat.—(*Open air*), Lachrymation.—(*Breathing*), Stitches in left side of abdomen; stitches in left side.—(*Deep breathing*), Gripping in pit of stomach.—(*Cold*), Throbbing pain in a hollow tooth.—(*After dinner*), Most symptoms.—(*Drawing in abdomen*), Pressure below navel; pressure between pit of stomach and navel.—(*Eating*), Pain in blisters on tongue.—(*Emotional excitement*), Internal trembling.—(*Violent expiration*), Pressing stitch in right side of chest; stitches in præcordial region.—(*Heat*), Throbbing pain in hollow tooth.—(*After being heated*), Sticking and tearing in limbs.—(*In the house*), Pain in head.—(*During menses*), Anxiety; peevish and lachrymose; heaviness in forehead; inflammation of eyes; tightness and oppression in epigastric region; burning micturition; trembling of hands; weakness of hands and feet; unconscious starting in sleep; chilliness.—(*Motion*), Pinching in right hypochondrium; stitches in right side above navel; chest symptoms.—(*Nux vom.*), Most symptoms.—(*Pressure*), Tearing in a hollow tooth; sticking in region of

spleen; pressure beneath navel; stitches in left side of abdomen.—(*Raising arm*), Rheumatic pain in deltoid muscle.—(*During rest*), Most symptoms.—(*On rising from seat*), Paralytic pain in small of back.—(*Rubbing*), Itching.—(*Scratching*), Itching.—(*While sitting*), Most symptoms.—(*Standing*), Weakness of limbs.—(*Stooping*), Stitches in middle of sternum.—(*Swallowing*), Sensation of choking.—(*Touch*), Stitches in right side above navel.—(*Wine*), Nausea; headache; most symptoms.—(*Walking*), Pressure in side of abdomen; tearing and bruised pain in bend of knee; weakness of legs; tightness and stiffness of muscles of calf; tensive pain in right knee-joint; sticking in tibia; pain in heels.

Amelioration.—(*Open air*), Pain in head.—(*Bring into ear*), Itching in it.—(*Camphor*), Most symptoms.—(*Rest*), Pain in body.—(*Rubbing*), Itching of left eye; biting in inner canthus; tearing in margin of right foot; fornication.—(*Sitting bent over*), Nausea.—(*Walking*), Tearing in back of foot.—(*Washing with cold water*), Headache.

ZINCUM ACETICUM.

Zinc acetate, Zn. ($C_2H_3O_2$).

Authorities. (1 to 3 from Franz, Archiv. f. Hom., 6, Part 2, p. 192.) **1**, Hahnemann; **2**, Fr. Hahnemann; **3**, Langhammer (Patrick Duguid, Med. and Phil. Comment., vol. v, 1777, p. 84, a girl, æt. nine years, took Zinc flowers for fits, omitted); (4 and 5 from Roth, Journ. de la Soc. Gall., Mat. Med. Pure, vol. i, p. 491); **4**, Devaux, Procès-verbal de la séance pub. de la Soc. de Liège, 1813; **5**, Henry, Med. and Phys. Journ., 1803, p. 396.

Mind.—Anxious, quiet, does not speak a word, and to the question, "how she feels," she only answers, "Let me alone, I shall soon be better,"².

Head.—Heaviness of the head.²—Throbbing headache, as if it would come out at the forehead.^{2,†}—Headache in the forehead, as if the brain were sore, and were sprinkled with salt.²—Dull sticking, painful sensation in the forehead (after two hours).²—Sharp stitches in the frontal region (after thirty-three hours).³—Needlelike stitches in the left temple (after three hours).³.

Ear.—The left ear is swollen internally, and painful on putting the finger into it, and on external touch.².

Face.—Paleness of the face.²—[**10.**] Looks very anxious.².

Mouth.—Tearing pain in the teeth, especially when touched.²—A blister on the forepart of the gum is painful, as if burnt.²—The tongue seems raw.²—Feeling in the mouth as though she had eaten something very hot, and had been burned, but not a burning sensation.^{2,‡}—Her mouth feels burnt.^{2,‡}—Bitter taste in the mouth, in the morning, after waking.²—Can recognize no taste to drink or food.².

Throat.—The throat seems too tight, and the tongue too short.².

Stomach.—Very frequent empty and at times ineffectual eructations.²—[**20.**] Sour eructations, with shaking chill over the whole body.²—Eructations tasting of the food, three hours after eating.¹—Nausea after eating (after six hours).¹—Nausea (after ten minutes), followed by fine needlelike stitches in the throat, then vomiting of bitter sour mucus, whereby the sticking was more violent, afterwards chilliness in the back, which he

† From external application to the urethra.

‡ From injection into the vagina.

sought to relieve by shrugging the shoulders; the shivering lasted eight minutes,¹.—Nausea in the morning, feeling of griping in the abdomen, as if he were distressed by indigestible food,¹.—Great nausea, as if he would vomit, with salivation, like waterbrash (after half an hour),³.—Vomiting,⁵.—Vomiting and diarrhœa,⁴.—Vomiting, with much retching, with rising up of acidity and shaking chill, during and after vomiting,².—Sensation of a small swelling in the pit of the stomach, painful to touch, previous to the menses,².—[30.] Pressing pain beneath the pit of the stomach,².—Pressure and sticking in the pit of the stomach, aggravated by motion, late in the evening,¹.—Disagreeable sensation in the stomach and abdomen, as of emptiness and hunger, two hours after dinner,¹.

Abdomen.—Violent griping in the abdomen, so that she was obliged to lie down,².

Rectum and Anus.—Urging to stool a few times at night, followed by a pasty stool,¹.

Stool.—Diarrhœa every hour during the day,².—Diarrhœa of a dark color, after dinner,¹.

Urinary Organs.—Contraction of the urethra (immediately after the external application),¹.—Biting sensation in the urethra,¹.—Frequent, increased desire to urinate and irritation to urinate (like a burning?),¹.—[40.] Much watery urine (after four hours),¹.

Chest.—Much mucus comes from the chest in the forenoon, with a kind of nausea,².

Back.—The back is very much affected, on stooping a sudden shooting in it, as if all strength would leave him,¹.

Superior Extremities.—Weakness in both arms,².—Pain in the left arm, which seems heavy like a weight, the wrist hurts on moving it, and at night he does not know where he shall put his arm, many positions cause pain in the arm, at times a sticking,².†—Drawing in the right arm several times a day, with trembling and loss of power in it,².—Pressing tearing in the muscles of the right upper arm, during rest and motion (after a quarter of an hour),³.—Stitches in the muscles of the right forearm, shooting upwards, during rest and motion (after ten hours),³.—Painful tension above the wrist, in the left forearm (after six hours),³.—Pressing pain in the ball of the right hand (after one hour),³.

Inferior Extremities.—[50.] Pressing sticking in the muscles of the left thigh, while walking in the open air (after ten hours),³.—Tensive pain in the upper part of the right calf, while walking in the open air (after four hours),³.

Generalities.—She wishes to walk, contrary to habit,².—Frequent alternations between sitting and walking about,².—Feels bad in the afternoon,².—Weakness and weariness on going upstairs,¹.

Skin.—Papular eruption filled with pus on the forehead and neck; when opened it discharged blood and pus,².‡—Red papular eruption above both knees, which caused a tickling and voluptuous itching,¹.

Sleep.—Sleepiness during the day, frequent yawning,¹.

Fever.—Shaking chill,².—[60.] Shaking chill during and after vomiting,².—Several times a day he feels hot, as if the throat had been burnt by alcohol,².—Burning heat in the face in the evening, and heat over the

† From injection into the urethra.

‡ From external application to the urethra.

whole face and redness of the cheeks, without thirst (after eleven hours),³.—Nightsweat,².

Conditions.—**Aggravation.**—(*Motion*), Pressure in pit of stomach.

ZINCUM CYANATUM.

Zinc cyanide, ZnC_2N_2 .

Authority. Kopp, *Denkwürdigkeiten*, vol. iii, p. 376 (Roth, *Journ. de la Soc. Gall., Mat. Med. Pure* vol. i, p. 496).

Great excitement.—Bad temper.—Very subject to anger.—Very great sensitiveness.—Congestion to the head.—The face suddenly changes color.—Constipation.—Great physical agitation.—General trembling, from time to time.

ZINCUM FERROCYANATUM.

Zinc ferrocyanide, ZnFeC_2N_2 .

Authorities. (Roth, *Journ. de la Soc. Gall., Mat. Med. Pure*, vol. i, p. 497); **1**, Hufeland's *Journ.*, vol. i, p. 106; **2**, Klokow, *ibid.*, vol. lxvii, p. 131.

Slight nausea,¹.—Colic, vomiting, and diarrhœa,².—Constipation,¹.

ZINCUM MURIATICUM.

Zinc chloride, ZnCl_2 .

Preparation. Solutions in water or alcohol.

Authorities. (1 and 2 Franz, *Archiv. f. Hom.*, 6, Part 2); **1**, Haneke, *Rust's Mag.*, 22, p. 75, effects of internal use of a solution of 1 gr. of Zinc with 2 drachms Spirit muriate ether, 5 drops every four hours; **2**, same, external application of 2 grs. Muriate of zinc to 1 oz. water, on lint; **3**, Orfila, two persons ate Chloride of zinc in food, instead of salt; **4**, Thos. Stratton, M.D., *Edinb. Med. and Surg. Journ.*, 1848 (2), 335; Elizabeth R., æt. seventeen, took a solution of about 12 grs. Chloride of zinc; **5**, same, Jas. C., æt. fifty-four years, drank a solution of about 200 grs. Chloride of zinc; **6**, H. Letheby, *Lancet*, 1850 (2), p. 23, a girl, æt. fifteen months, drank a quantity of Burnett's Disinfecting Fluid, death in ten hours after beginning of symptoms; **7**, Meinel, *Deutsche Clin.*, 1851 (S. J., 73, 167), the Muriate; **8**, John Milton, *Times and Gaz.*, 1851 (2), p. 382, John W., drank a glass of a solution of the chloride; **9**, T. O. Ward, *ibid.*, p. 497, a woman, æt. forty years, took a solution of the chloride; **10**, Cattell, *Edinb. Med.*, 69, 496,† and *Gaz. Med. de Par.*, 1845 (*Brit. Journ. of Hom.*, vol. xi, 1853, p. 173), effects of the chloride; **11**, Richard Hasall, M.D., *Lancet*, 1853 (2), p. 159, a man swallowed 3 ozs. "Burnett's Fluid" on an empty stomach; **12**, Wm. Thorn, M.D., *Lancet*, 1854 (2), p. 259, a boy, æt. twenty months, drank a teaspoonful of "Crew's Disinfecting Fluid"; **13**, Geo. Willis, M.D., *Association Med. Journ.*, 1855, p. 743, Mr. P., swallowed about 1 oz. of same; **14**, F. Cornelius Webb, M.D., *Med. Times and Gaz.*, 1856 (2), p. 59, Mr. W., took a fluid oz. of "Bur-

† This reference is wrong.

nett's Fluid ;" **15**, G. R. Cubitt, *Beale's Archives of Med.*, vol. i, 1857, p. 194, H. V. L., æt. fifty-six years, took on an empty stomach 2 tablespoonfuls of Morell's solution of Chloride of zinc ; **16**, Henry Porter, M.D., *Brit. Med. Journ.*, 1859, p. 651, Mr. F., took at least 2 ozs. Burnett's Fluid (more than 6 drachms Chloride of zinc) ; **17**, J. T. Clover, *Pharm. Journ.*, vol. xviii, 1859, p. 140, a man swallowed some of same ; **18**, Dr. Wilks, *Guy's Hosp. Rep.*, 1859, p. 128, a woman, æt. forty years, drank a glass of same, death in fourteen weeks ; **19**, Henry G. Wright, M.D., *Lancet*, 1861 (1), p. 29, a girl, æt. one year and a half, swallowed $1\frac{1}{2}$ drachms of same ; **20**, same, a girl, æt. thirteen years, while suffering with scarlatina, drank a saucer of same ; **21**, J. W. Cousins, M.D., *Med. Times and Gaz.*, 1862, (2), 404, a woman drank some of same, death in seven hours and a half ; **22**, Mr. Crossing, *Lancet*, 1864 (2), p. 267, a woman, æt. sixty-three years, swallowed $1\frac{1}{2}$ ozs. of same, death in fifteen hours and a half ; **23**, J. R. Wardell, M.D., *Lancet*, 1864 (1), p. 35, a lady, æt. twenty-one years, drank some of same, death on the second day ; **24**, H. M. Tuckwell, M.D., *Brit. Med. Journ.*, 1874 (2), p. 297, a girl, æt. twenty-one years, swallowed about $\frac{3}{4}$ teacupful of same, death after one hundred and sixteen days ; **25**, Lucien Dreyfus, *Bul. de la Soc. Anat. de Paris*, 1876, p. 122, effects of the Muriate.

Mind.—Excessive nervous derangement and prostration,¹¹.—Great disposition to pick the bedclothes,¹¹.—Anxiety,¹.—Anxiety and alarm,^{5 10}.—Considerably depressed,¹⁸.—Anxious and depressed face (second day),²⁴.—Though apparently quite conscious, she had no recollection of what occurred to her for some time,⁹.—Intellect clear by day, but she wandered by night,²⁴.—Semicomatose state, vital powers much prostrated,⁶.—[**10.**] Insensibility,²¹.

Head.—Giddiness,^{9 21 22}.—Vertigo and fainting,¹⁰.—Vertigo and rush of blood to the head, as if she had taken some strong spirit,¹⁰.—Rush of blood to head,⁹.—Most distressing headache,¹¹.—Headache in the occipital and frontal regions,⁷.

Eye.—Eyes sunken,¹⁸.—Pupils widely dilated (in fifteen minutes),¹².—Pupils small,²³.—[**20.**] Pupils contracted to the size of a pin's head (after one hour) ; dilating (after five hours),¹⁵.—Loss of sight,^{9 21 22}.

Nose.—The sense of smell underwent a very singular perversion. Every kind of roast meat, if ever so slightly burnt, roasted coffee, tea, etc., had to my patient an intolerable putrid odor ; roast mutton was especially offensive. Scents and perfumes with alcohol gave an odor resembling that of hemlock ; on the other hand, putrid and fecal matter had no apparent odor at all,¹¹.

Face.—Face distorted with agony, and livid,⁸.—Anxious expression of countenance,^{16 18}.—Countenance pale and anxious,⁶.—Face pale, then livid,²¹.—Countenance dusky and anxious,²³.—Face flushed (after one hour),¹⁵.—Swelling of the lips, and thick transparent mucus adhering to them,⁶.—[**30.**] Vesication of the lips and tongue (in one hour and a half),²².

Mouth.—**Teeth.** Toothache in carious teeth,¹⁰.—**Gums.** Gums spongy (one hundred and sixteenth day),²⁴.—Gums red, and covered with white sordes,¹⁸.—**Tongue.** Tongue furred,¹⁸.—Tongue gradually became coated (after ten days),¹⁹.—Tongue and mucous membrane of fauces milk-white (third day),¹⁶.—Tongue coated with a white fur (after twenty-one days),¹⁹.—Tongue yellow,⁷.—Tongue and pharynx coated with a thick yellow fur,⁹.—[**40.**] Tongue intensely red,¹¹.—Tongue, mouth, and gums covered with brown sordes,¹⁸.—**General Mouth.** Frothing at the mouth,⁸.

—Peculiar fetor of breath (one hundred and sixteenth day),²⁴.—Lining membrane of mouth had the appearance of having undergone the action of a corrosive substance,⁶.—Back part of the mouth and fauces much inflamed,¹⁶.—*Saliva*. Salivation,⁷.—*Taste*. Astringent taste,³.—Metallic taste, as of copper in the mouth,¹⁰.—The perversion of taste was not less remarkable than that of smell. Roast meats and crusts of bread were intolerable; and most foods had a burnt taste, especially *raw oysters*, which resembled burnt flour, and felt quite dry, clinging to the mouth. Things naturally insipid, such as the crumb of bread and potato, gave a more natural flavor, and were better relished. Acids did not taste acid, nor alkalis alkaline, and to him quinine was not bitter,¹¹.

Throat. [50.] Throat inflamed and painful,¹⁷.—Throat swollen and painful,⁶.—Constriction of the throat,^{3 21}.—Pain in the posterior part of the throat, immediately,²⁵.—Throat sore, and some difficulty in swallowing (second day),²⁴.—Burning sensation in throat and chest,¹⁸.—Burning pain in the gullet,^{5 10}.—At once a burning sensation all down the throat, with great pain and a sense of tightness in my stomach,¹⁶.—Soft palate, uvula, tonsils, and pharynx inflamed (second day); the mucous membrane of the soft palate covered with a white film, not unlike diphtheritic membrane, a slough was separating from the right tonsil and uvula (fourth day); soft palate covered with a yellowish slough (eighth day),²⁴.—The first symptom experienced was a sense of constriction in the fauces, and then a hot burning sensation in the stomach, marked the arrival of the fluid in that organ,¹¹.—[60.] Burning pain in œsophagus and stomach (in one hour and a half),²².—Hot burning pain along the course of the œsophagus, and at the pit of the stomach,²³.—Difficulty of swallowing,²⁵.—Inability to swallow food, an entirely nervous symptom, as there was no stricture of the throat (after a month),¹⁶.

Stomach.—Appetite and Thirst. No natural appetite, but a morbid craving for something wherewith to allay the irritation at the stomach,¹¹.—After two days she gradually pined away, refusing food, or only swallowing it after great persuasion, and invariably rejecting it in about an hour and a half, slightly altered (as by partial digestion), and sometimes mixed with a little blood,¹⁹.—Indisposition and want of appetite for three weeks,⁴.—Anorexia for some weeks,¹⁰.—Constant thirst, but an intense aversion to swallowing any fluids (after twenty-one days),¹⁹.—Distressing thirst (after five hours),¹⁵.—**Hiccough.** [70.] Hiccough,⁷.—**Nausea and Vomiting.** Nausea,²¹.—Great nausea,^{2 5}.—Constant nausea and occasional vomiting,¹³.—Nausea and pain; indisposition and want of appetite for three weeks,¹⁰.—Most violent sickness; vomiting of a frothy liquid,⁶.—Nausea and vomiting,².—Frequent retching (second day),²⁴.—Ten days after swallowing the poison she was suddenly seized with violent retching, and vomited a mass of black blood, followed by several small clots, all of dark color,¹⁹.—Vomiting,¹⁵, etc.—[80.] Distressing vomiting,⁸.—Vomiting; continued more or less for a week, and all food was rejected for three weeks,⁹.—Constant vomiting; after some hours he vomited little else than blood of a dark color,¹⁴.—Frightfully vomited and purged (in five minutes),¹².—*Vomiting of all her food; she rejects everything*, except boiled milk, for two months,¹⁰.—Vomits shreds of mucous membrane nearly an inch square,¹⁰.—Vomited the contents of the stomach (immediately); less vomiting, but still a little retching, with which she brought up a little mucus (third day); vomiting began again, when she brought up a potful of black fluid, with much mucus, some threads of tissue, and much clotted

milk (tenth day); vomiting and pain both increased (fifty-eighth day); continued vomiting; the vomited matter contained a considerable quantity of altered blood (sixty-fifth day); vomited matters whitely brown in color, with a dark sediment (seventy-fourth day); retched and vomited at intervals, a brownish fluid, with a flocculent sediment (ninety-fifth day); vomited fluid tinged with bile (one hundred and eighth day); retched at intervals and vomited a greenish fluid (one hundred and sixteenth day),²⁴.—Spontaneous vomiting (after one hour); after this time the mixture (eggs and milk) was thrown off instantly, after being taken by the most violent action; it returned as a solid coagulated mass, one portion of which was so large and firm as almost to cause suffocation. This treatment was kept up through the night and until 2 P.M. of the following day, the patient vomiting continuously, and rejecting the milk and eggs in the same curdled state. In the evening blood appeared in the vomited matter, a quantity of mucus, and a portion of mucous membrane, measuring an inch and a quarter square. Throughout the third day the vomited matter was still streaked with blood,¹¹.—Vomiting (after ten minutes); the sickness continued, and ever since, after taking food, she has vomited,¹⁸.—Violently and continually vomiting, the matter ejected being a muco-biliary fluid,²³.—[90.] Full and free vomiting to the amount of many pints, after emetics; after five hours the stomach could retain nothing,¹⁵.—Vomiting at first of food and the disinfecting fluid (after mustard and water); afterwards tendency to vomit from slightest pressure on stomach; later vomiting at intervals of large quantities of mucus, mixed with a considerable portion of dark-colored blood,¹⁶.—Blood was vomited at frequent intervals, sometimes bright, often partly digested, and frequently with a most offensive odor,²⁰.—Hæmatemesis occurred to a considerable amount,²⁰.—**Stomach.** Many weeks elapsed before he lost all his symptoms; dyspepsia was immediately produced by taking solid animal or stimulating food, and about three months passed before he was quite well,¹⁴.—Much tenderness on pressure at the epigastrium (second day),²⁴.—Upon pressing the region of the stomach, next day, he winced very much,¹².—Pain in the stomach,^{1 9 10 25}.—Pain in stomach and throat,¹⁷.—Violent pain in the epigastric region,⁷, etc.—[100.] Violent pain in the epigastric region, as if spreading from other parts of the abdomen,³.—Great pain and heat in the stomach and bowels,¹³.—Pain in region of stomach increased by the slightest pressure,¹⁶.—Severe but not agonizing pain at the pit of the stomach, with a sense of distension; the epigastric pain extended into the right hypochondrium, and was somewhat increased by pressure (after one hour); afterwards the pain increased and extended towards the umbilicus; it became intolerable, and it was difficult to keep the patient in bed (after two hours and a half),¹⁵.—Pain and nausea,⁴.—A feeling of sinking and an urgent craving for food,¹¹.—Violent clawing pain in the stomach, which persisted in great severity for a long time,¹¹.—Severe pain and burning in the stomach,⁸.—Burning in the stomach,^{1 10}.—Burning heat in stomach,⁹.—[110.] Burning and griping pain in stomach (instantly),⁵.—Burning pain at the epigastrium, and under the left ribs (second day),²⁴.—Burning pain, griping in stomach, great nausea, and sense of coldness, vomiting of inodorous matter,¹⁰.—Burning sensation in stomach, nausea and vomiting,¹⁰.—Severe burning and twisting pain in stomach; the legs are drawn up to the belly,¹⁰.—Immediately seized with a violent burning pain at the pit of the stomach, and vomited the contents of it,²⁴.

Abdomen.—Severe pain in the left hypochondrium (fourth day);

pain constantly felt in the left hypochondrium, and increased by food (eighth day),²⁴—Pain in left hypochondriac region,¹⁸—Abdomen painful, distended,²⁰—Abdomen shrunken, and the edge of the liver sharply traceable (after twenty-one days),¹⁹—[120.] Abdominal tenderness (after a few hours),¹³—Abdomen tender on pressure,¹⁰—Intense abdominal pain,²¹.

Stool.—Diarrhœa,^{3 9 11}—Violent diarrhœa,³—Several loose watery evacuations of the bowels,¹⁵—Sudden diarrhœa, with vomiting; she is found in a state of collapse,¹⁰—Frightfully purged and vomited (in fifteen minutes),¹²—Purging; the motions thin and of a dark-brown color,²²—Large loose and watery motion (after half an hour); a desire to go to stool was accompanied for two hours by the discharge of nearly three pints of mucus, mixed apparently with shreds of the intestinal mucous membrane (after a few hours),¹³—[130.] Stools fetid,¹⁰—There was no action of the bowels until the third day, when they acted spontaneously; the stool was of a black coffee-grounds appearance, and entirely wanting the odor of feces. It was quite a fortnight before anything but black stools appeared; then they were pale, clayey, dry, and crumbling, showing no evidence of bile,¹¹—Bowels moved only three times in one hundred and sixteen days; a copious, black, pitchy stool followed the enema (twentieth day); after an injection another copious dark pitchy stool (fifty-first day); after an injection of warm olive oil, passed a copious motion, pultaceous in consistence, and of a greenish color; the first action of the bowels for eight weeks (one hundred and eighth day),²⁴—Constipation,⁷.

Urinary Organs.—Had passed daily on an average one pint of urine, of specific gravity 1025–1030, turbid with lithates, but containing no albumen (ninety-eighth day),²⁴.

Respiratory Organs.—Voice. Spoke in a whisper from excessive debility,¹⁸—Voice feeble, almost whispering (second day),²⁴—Voice reduced to the faintest whisper (one hundred and sixteenth day),²⁴—Voice gone, and could express herself only by whispers (in one hour and a half),²²—Lost her voice, but gradually recovered after five weeks,⁹—**Respiration.** [140.] Breathing thoracic and rapid,⁶—Short breath,¹—Great difficulty in breathing,³.

Heart and Pulse.—Pain in the præcordial region,¹—Pulse rapid,⁷—Pulse quick and fluttering,⁶—Pulse small, rapid, and contracted,^{3 16}—Pulse very feeble and rapid,²¹—Small, rapid pulse,^{1 2}, etc.—Pulse 144, very feeble (second day),²¹—[150.] Pulse 90,¹¹—Pulse soft, about 80 (after one hour); sinking rapidly, becoming more weak and frequent (after five hours),¹⁵—Pulse *small and weak*, 45,¹⁰—Pulse 45, small, weak (in twenty minutes),⁵—Pulse quick and fluttering,²³—Hard jerking pulse (after a few hours),¹³—Thready pulse (twenty-first day),¹⁹; (second day),²⁵—Pulse feeble,¹⁷—Nearly pulseless (in fifteen minutes),^{12 18}.

Extremities.—Tremor of the limbs,¹¹.

Superior Extremities.—[160.] Pains at the shoulder and back of a spasmodic character (second day),²³—Occasional attacks of tetanic spasms in the right forearm and hand, which lasted for a few minutes and then passed off,²⁴.

Inferior Extremities.—Legs drawn up on belly (in twenty minutes),³—Severe cramp in the lower extremities (after two hours and a half),¹⁵.

Generalities.—Greatly emaciated,¹⁰—Great emaciation was observed; the skin looked as if it was stretched tightly over the bones of the face and hands,¹¹—Extreme emaciation (one hundred and sixteenth day),²⁴.

--Lay prostrate in bed,¹⁸.—Bent nearly double,⁸.—A gradual improvement was made for the first two months, but too early a return to business brought on an attack of illness of extreme severity. The patient was seized with symptoms resembling the onset of influenza; there was excessive nervous prostration, hyperæsthesia, and great irritability, which passed into a condition resembling tetanus; no noise could be borne; the slightest shocks caused a start; if the bedclothes touched the toes, tremors approaching convulsions ensued. For five nights there was no sleep. There was a terrible pain in the right side of the head, which lasted for hours; when this subsided, nausea and retching ensued; the pulse rose to 120 or 130. There was some febrile movement; the skin was alternately very dry and moist. During this secondary attack the liver again evinced a sluggishness of action, and the urine, which had hitherto been normal in quantity, became excessive; on one occasion, seven pints were passed in five hours. For fourteen days the patient was confined to his bed, when the intensity of the symptoms had subsided, he still complained of the gnawing pain in the stomach,¹¹.—[170.] Sometimes paralysis,³.—Convulsions,^{1 10}.—General spasms,³.—Jactitation and restlessness (after five hours),¹⁵.—During the night she had occasional fits, losing consciousness, and having twitchings of the facial muscles,²².—Spasmodic movements of the muscles of the face and extremities,³.—Weak and thin; reeled rather than walked,⁸.—Great weakness,²⁰.—General exhaustion,^{17 23}.—Profound prostration, followed by collapse and death,²⁵.—[180.] Restless,²¹.—Faintness,^{1 10}, etc.—Great faintness (second day),²⁴.—The collapse had become extreme; the face and extremities were purple, and the voice thick and husky, and subsiding into a hoarse whisper; the heart's action quite imperceptible, both at the wrist and cardiac region, yet the state of things was more like that of a cholera patient than one in syncope; the pupils were largely dilated, and he complained of being unable to see distinctly (after nearly seven hours); he died without a spasm or struggle of any kind, retaining his consciousness to the last (after seven hours, and forty minutes),¹⁵.—Collapse, closely resembling cholera,⁹.—Pain in the affected part,².

Skin.—From the third day the skin assumed a ghastly bluish-green tint, this lasted for a long time,¹¹.—Skin dusky,¹⁸.—Arms livid and cold,¹⁸.—Skin dry and harsh as the child wasted (after ten days); harsh and dingy in hue, exhaling that peculiar odor which is almost distinctive of starvation (after twenty-one days),¹⁹.—[190.] Skin drawn tightly across the nose, and thinning off towards the mouth, in place of filling out to form the lips (after twenty-one days),¹⁹.—Trunk and extremities had a strange bluish mottled appearance, from innumerable petechiæ and vibices (one hundred and sixteenth day),²¹.—Skin dry and hot,⁷.—Skin of legs covered with thick scales (one hundred and sixteenth day),²⁴.

Sleep.—Utter inability to sleep,¹¹.—Slept restlessly, lying always on right side, with her legs drawn up, and ground her teeth during sleep (after ten days),¹⁹.

Fever.—Chilliness. Coldness,^{5 10}.—General surface of body cold and bedewed with perspiration,⁶.—Surface cold and wet, with clammy perspiration,¹⁴.—Very cold and pale (in fifteen minutes),¹².—[200.] Cold clammy skin,¹⁶.—Chill and heat,⁷.—Alternations of cold and heat,².—Extremities cold (after five hours),^{15 21 22}.—Skin moderately warm to the touch, though she constantly complained of cold, notwithstanding the heat of the weather was intense (after twenty-one days),¹⁹.—**Heat.** Sensation of warmth in the parts to which it is applied, quickly followed by violent

burning pain for seven or eight hours, till the parts are dead, when a white eschar forms,¹⁰.—Her temperature rose for the few days after the poison was taken till it reached 100.6°; it then fell slowly, and reached its lowest point 96.4°, the ninety-seventh day; from which time till death, it ranged from 96° to 98°, but it never fell below 96°.²⁴.—**Sweat**. Forehead bathed in sweat, the general surface warm (after one hour),¹⁵.—Clammy sweats (in one hour and a half),²².—Cold sweat,^{1 & 10}.—[210.] Surface bedewed with a cold clammy perspiration,²³.

ZINCUM PHOSPHORATUM.

Zinc phosphide, ZnP .

Preparation, Triturations.

Authority. (J. Ashburton Thompson, Practitioner. 1873 (2), p. 271.) **1**, a woman, aged twenty-six years, took 8 pills of $\frac{3}{4}$ grain each, for neuralgia; **2**, a woman, suffering from chronic gastritis, took nine doses of $\frac{7}{2}$ grain each, and a young man debilitated by mental occupation took seven doses of same.

They complained of severe frontal headache, accompanied by frequent stabs of pains, apparently darting from before backwards to the occipital region, but intracranial, and not attended by any disturbance of sensation in the scalp; these symptoms appeared to me to be those of neuralgia, or neuralgic at least; and the second case so named them from his sister's description of her sensations. Under a dose equivalent to one-twelfth of a grain of Phosphorus, both patients very quickly recovered, and have had no return of pain,².—Vomiting two or three times after the sixth dose, and again after the seventh and eighth,¹.

ZINCUM SULFURICUM.

Zinc sulphate, $\text{Zn. SO}_4\cdot 7\text{H}_2\text{O}$. (White vitriol.)

Preparation, Solutions in water.

Authorities. (1 and 2 from Franz, Archiv, 6, Part 2.) **1**, Peter Forest, Observation, lib. 3, obs. 40; **2**, Schüler, Journ. de Med., 1781; (3 to 8 from Roth, Journ. de la Soc. Gall., Mat. Med. Pure, vol. i, p. 467); **3**, Buchan, Domestic Medicine, vol. iii, p. 450; **4**, Fodéré, Med. leg., vol. iv, p. 163; **5**, Metzger, Material für die Staat, vol. i, p. 22; **6**, Opitz, Pyl's Aus. und Beutach, vol. ii, p. 12; **7**, Sartorius and Moosheim, Unters. über Zink, Koeln, 1826; **8**, Elliotson, Lancet, vol. i, No. 4; **9**, Dr. Werres, Hencke's Zeit., 1832 (Frank's Mag., 3), two children ate some in soup; **10**, G. G. Sigmond, M.D., Lancet, 1837-8 (1), 880, a young lady swallowed 2 ounces white vitriol in solution; **11**, Pyl's Memoirs (ibid.), a lotion of Sulphate of zinc was applied to the scalp of a boy, æt. six years, for a scaly eruption, death in five hours; **12**, Maloz and Jasinsky, in Mem. der Warsh. Med. Gesel. (A. H. Z., 14, 380), observations on one hundred persons; **13**, Tardieu, poisoning by solutions of white vitriol; **14**, Platner and Pignacca, Gaz. Med. di Lombardia, 1848 (Brit. and For. Med.-Chir. Rev., 1849 (1), p. 545), a woman, æt. twenty-five, took $1\frac{1}{2}$ ounces of the sulphate, death in thirteen hours and a half; **15**, Sister of last, æt. thirty-five, took a similar dose, recovery; **16**, same, a woman, æt. thirty one years, recovering after delivery, took $\frac{1}{4}$ ounce; **17**, E. C. Atkinson, M.D., Iowa Med. Journ. (Bost.

Med. and Surg. Journ., vol. li, 1854, p. 256), a man, æt. twenty-eight years, took a tablespoonful; **18**, Patrick Brennan, M.D., Lancet, 1855 (2), p. 52, Francis K., æt. nineteen years, took 4 ounces, dissolved in a gill of water; **19**, George D. Gibbs, M.D., Lancet, 1856 (1), p. 540, Mrs. S., æt. twenty-two years, swallowed a lotion containing 67 grains; **20**, Santesson, Preus. Verein. Zeit., 1859 (A. H. Z., M. B., 1, 27), a woman took about 4 ounces for constipation; **21**, John W. Ogle, M.D., Lancet, 1859 (2), p. 210, a man took the sulphate for some days, death; **22**, Mr. Skey, Med. Times and Gaz., 1862 (2), p. 252, a man, æt. fifty-two years, swallowed about $\frac{1}{2}$ ounce, death on the fifth day; **23**, J. W. Ramsey, M.D., Med. and Surg. Rep., vol. xx, 1869, p. 178, Marie, æt. twenty-eight years, took a tablespoonful of the sulphite; **24**, A. J. Mackintosh, M.D., Lancet, 1872 (1), p. 717, a man, æt. twenty-one years, swallowed 1 ounce in warm water; **25**, A. K. Minich, M.D., Philada. Med. Times, 1872, p. 208, Mrs. G., æt. twenty-eight years, injected about 2 drachms in solution into her vagina, for leucorrhœa; **26**, Dr. Lutier, Gaz. des Hop., July, 1877 (Month. Hom. Rev., vol. xxii, p. 99), eighty prisoners swallowed each a pint of milk, containing almost 2 grams of the sulphate, the first symptoms, the same in all, after fifteen hours,

Mind.—Delirium,¹⁶.—Apparently delirious,²¹.—Anxiety,¹⁴.—Great nervous anxiety and depression (after three-quarters of an hour),¹⁹.

Head.—Dizziness (second day),²⁴.—Headache,^{16 20}.—Violent headache (after fifteen hours),²⁶.—Violent headache, with thirst,⁶.—Burning acute pain in the head,¹¹.—[**10.**] Immediately he felt (in his own words) as if a powerful electric shock had passed through his head; he expected that his brains would have burst through his skull,¹⁸.

Eye.—(Bluish rings around the eyes),²⁰.—Eyes of a heavy dull appearance,¹⁰.—Eyes staring (after three-quarters of an hour),¹⁹.—Eyes almost fixed and of a peculiar bright lustre,²⁵.—Convulsive movements of the eyeballs and upper extremities,¹⁸.—Copious flow of tears from the eyes (after one hour),²³.—Pupils much dilated (after three-quarters of an hour),¹⁹.

Ear.—(Roaring in the ears),²⁰.

Face.—Countenance pallid,¹⁰.—[**20.**] Pale, sunken countenance,³.—Face pale, sunken, with cold extremities and convulsive pulse,¹³.—Countenance pale, expression anxious,²².—Leadens, purple tint of the countenance, and contracted features,¹⁸.—Features shrunken,²⁵.

Mouth.—Tongue moist, even with those little affected, and slightly blanched,²⁶.—Tongue partially paralyzed,²³.—Gums a little swollen and red upon the outer edge,²⁶.—Great irritation of the whole mucous membrane (after one hour),²³.—Exceedingly sour taste,³.

Throat.—[**30.**] Inflammation of the throat, so that he threatened to suffocate,¹.—A sense of choking and constriction round the chest,¹⁸.—Tenderness in the throat, epigastrium, and abdomen,¹⁸.—Slight soreness of the throat (second day),²⁴.—Burning in throat and stomach,¹⁴.—Burning and constriction at the fauces,¹⁶.—Contraction of the œsophagus to such a degree that he is afraid of choking,³.

Stomach.—Intolerable thirst,¹.—Much thirst and dryness of the mouth (after three-quarters of an hour),¹⁹.—All complained of heartburn,²⁶.—**Nausea and Vomiting.** [**40.**] Sickness, colic, at first without either evacuation or excessive weakness (after fifteen hours),²⁶.—Sickness at the stomach,²³.—Vomiting,^{1 2}, etc.—Violent vomiting,^{5 10}, etc.—Frequent vomiting,²¹.—Vomiting and diarrhœa,^{6 13}.—Vomited and purged incessantly,¹⁸.—Violent vomiting, with cramps, severe pain, and burning in the

stomach, and extreme prostration (soon),²³.—Vomiting, the rejected matters tasted similar to the fluid she had swallowed (in fifteen minutes),¹⁵.—Instantly vomited, and then became affected with almost incessant retching and purging for half an hour, which continued afterwards at short intervals for three hours, and then gradually diminished.¹⁴.—[50.] Only three or four had vomitings of bilious matter,²⁶.—**Stomach.** Burning sensation in stomach (after three-quarters of an hour),¹⁹.—Burning heat at the stomach,³.—Excessive, burning pain in the stomach, with from time to time slight efforts to vomit,¹³.—Complained of pain at the epigastrium and of feeling sick,²².—Pain in the stomach, gradually involving the whole abdomen,².—Excessive pain at the epigastrium,¹⁶.—Acute pain in the region of the stomach, accompanied with a sensation of burning,¹⁰.

Abdomen.—Inflammation of the abdomen, with retraction of the umbilicus and terrible colic,¹³.—Inflammation of the whole lower abdomen, with retracted umbilicus and misery,⁴.—[60.] (Abdomen retracted and sunken, somewhat distended in the region of the colon),²⁰.—Pain and great distension of the abdomen,¹².—Great pain in abdomen, limbs, etc.,¹⁴.—Much pain in the abdomen, more especially in the region of the bladder (second day),²⁴.—Severe pain in the region of the groin,²⁵.—All suffered from sharp, almost continuous colic,²⁰.

Rectum.—In some cases there was rectal tenesmus,²⁶.—Constant desire to eliminate and discharge the fæces (after one hour),²³.

Stool.—Diarrhœa,^{2 11 14}.—Violent purging,^{17 24}.—[70.] Purged and vomited incessantly,¹⁸.—Bowels acted freely immediately,²².—Stools infrequent, the fecal matter hard and yellowish, mixed with the remains of the food of Wednesday, such as haricots, pieces of meat, etc.; afterwards a very abundant bilious diarrhœa set in,²⁶.—*After three months the evacuations became bloody, accompanied by sticking and cutting pains in both sides of the abdomen and along the colon; these dysenteric symptoms lasted three weeks,²⁰.

Respiratory Organs.—Cough (after one hour),²³.—Violent cough, with bloody and purulent expectoration,¹.—Weak respiration, 15 in the minute,¹⁸.—Respiration difficult (after one hour),²³.—Considerable dyspnœa (after one hour),²³.

Chest.—Pains in the chest with vomiting, followed by death,⁷.—[80.] Violent burning pains beneath the chest,²⁰.

Heart and Pulse.—(Palpitation on every motion),²⁰.—Pulse rapid and scarcely distinguishable, at times dicrotic,²⁵.—The pulse full, 100 to 120 in the worst cases,²⁶.—Pulse frequent and small,¹⁴.—Spasmodic pulse,³.—Pulse 74, weak and small (after three-quarters of an hour),¹⁹.—Pulse about 70, and of small volume,²⁷.—Pulse fluttered,¹⁰.—Pulse languid, 60,¹⁸.—[90.] Pulse 50, very feeble, small, and easily compressible (after one hour),²³.—Almost complete loss of pulse, as in true cholera,¹².

Extremities.—In the greater number, there were trembling of the limbs and very painful cramps; the slightest pressure increased these pains, both in the limbs and in the abdomen,²⁶.—Great pain from cramp in the arms and legs (second day),²⁴.

Superior Extremities.—Convulsive movements of the upper extremities and eyeballs,¹⁸.

Generalities.—(Excessive anæmia),²⁰.—Very tremulous,²¹.—Tremors,¹⁶.—Convulsions,⁹.—Severe convulsions,¹¹.—[100.] Convulsions, followed by death,⁶.—(General weakness),²⁰.—General weakness so considerable that many were unable to stand, and had to be carried into the infirmary,²⁶.

—General exhaustion and death, in nine hours,⁵.—Prostration,¹⁸.—Extreme prostration, accompanied with distressing restlessness and anxiety,¹⁴.—So prostrate that he could neither walk nor stand (in half an hour),²⁴.—Debility, long remained extreme,¹⁵.—Heaviness in the whole body,²⁰.—The nerves are set on edge,³.—[110.] A feeling “as though her blood could scarcely struggle through her veins,”²⁵.—Titillation all over the body, with irresistible inclination to laugh,⁸.—All the prisoners resumed their work six days after poisoning, but the general weakness continued some days longer,²⁶.

Skin.—Development of blisters on the neck, at first discharging bloody water, afterwards thin green, badly-smelling pus, which lasted about a month; after this the gum began to swell, and upon it developed blisters from the size of the head of a pin to that of a pea, which burst and discharged blackish-brown substances, with blood, and of an extremely disagreeable odor and taste; then the lips and gum began to swell, so that the patient could scarcely speak; these symptoms gradually diminished, but afterwards returned more violent than ever, and were accompanied by the most violent pain in the tongue and swollen lips; the swelling increased, extended over the face, neck, and throat, especially on the left side. The doctor noticed a great similarity between the lip and tongue and a syphilitic disease which affects these parts, but there were no other symptoms of a syphilitic affection, and the violent colitis, with which the patient suffered, seemed to indicate the toxic origin of the trouble. When brought into the hospital the tongue was so large that there was scarcely room for it in the mouth; the upper surface was inflamed, and there were fissures with hypertrophied papillæ; the enlarged lower lip hung down; its pale mucous membrane was cracked, and secreted a thin whitish-yellow liquid; this was associated with chronic diarrhœa; the evacuation was mixed with blood, thin, at times greenish-yellow, and accompanied by violent pains and rumbling in the abdomen,²⁰.†—(Skin pale yellow),²⁰.—Deadly pallor of the skin, which was milky in its whiteness,²⁵.

Sleep.—Sleepy and stupid; she wanted most of all to sleep and to die in peace,²⁰.

Fever. — Chilliness. Coldness,¹⁸.—Shivering,¹⁸.—Outwardly shivered, and had slight quivering of the lips (after three-quarters of an hour),¹⁹.—[120.] Skin cold and clammy,²².—Whole surface of body cold, and covered with a clammy perspiration,²⁵.—Extremities cold,^{3 10}.—Temperature of skin diminished,¹⁴.—**Heat.** Febrile action, which was followed by profuse sweating, that soon became excessive (second day); the fever, with the pain at the epigastrium, continued till the sixth day,¹⁵.—Constant heat of the body, on account of which he cannot sleep,¹.—Burning heat of the extremities,³.—**Sweat.** Profuse sweating (after six hours),¹⁶.—Her hands were covered with a cold clammy perspiration, but they felt to herself quite hot, and she seemed anxious to get hold of anything to cool them (after three-quarters of an hour),¹⁹.

† This patient had suffered for two years from diarrhœa, which at times alternated with obstinate constipation. From this diarrhœa the patient had become exceedingly emaciated and anæmic.

ach,¹¹.—Pressure from within outward, under the upper part of the sternum (fourteenth day); more on the right side (sixteenth day),².—Pressing pain under the sternum at 4 P.M. (nineteenth day),².—Stitching pain in the right side of the chest (fifteenth day),².—Violent stinging-pressing pain in the left side of the chest, in the region of the heart, at 4 P.M. (nineteenth day),².

Heart and Pulse. Fluttering of the heart (third day),¹¹.—She feels exhausted; fluttering of the heart; languid; has an empty sensation (third day),¹¹.—Accelerated circulation,¹¹.—Pulse hard and full; heat with redness in the face; humming in the ears; lasted thirty minutes, at 11 A.M. (third day),¹⁰.—Pulse in the evenings full, hard, and slow (sixth day),⁹.—[230.] Pulse from 72 and weak to 84 and full, with the rush of blood to the head (four hundred and sixteenth day),².

Neck and Back.—**Neck.** Stiffness in the neck (fifth day); worse on motion (seventh day),¹⁰.—Stiff neck and headache, mostly in the temples (ninth day),⁷.—Stiffness in the neck, more on the left side (ninth day),².—Stiffness of the neck on the left side, with the headache (eleventh day),².—Stiffness in the back of the neck with nausea (thirteenth day); with the headache (sixteenth day),¹¹.—A loud cracking sound in the first cervical vertebra, on rising from sitting, with a little stiffness in the left side of the neck (tenth day),².—Cracking sound in the region of the first cervical vertebra on looking upward, in the evening (thirty-first day),².—**Back.** Lameness in the back, after much walking,¹¹.—Backache in the afternoon, passed off and reappeared towards evening (fourth day),⁷.—[240.] Backache, as from weakness, better when sitting and leaning against something (twelfth day),⁷.—**Dorsal.** Dull aching, drawing pain in the back, between the shoulders, at 6 P.M. (tenth day),⁷.—**Lumbar.** Dull aching pain in both lumbar regions (kidneys), more in the right side; better when leaning against something (ninth day),².—Dull pain in the right lumbar region (ninth day),².—Stiffness and heavy feeling in the lower part of the back; pain in the abdomen; better after going to bed (first day); drawing pain in the back and lower part of the abdomen, worse than the first day; had to go to stool soon after at 10 P.M. (third day),⁵.—Pain in the small of the back, as if beaten, while walking or standing (third hour),¹.—Drawing, sometimes stitching pain in the small of the back, and lower down in the abdomen, could not sit erect; this pain went up with stitches through the chest, and settled as stinging pains under the left shoulderblade; pain increased by deep breathing, at 7 P.M. (fifteenth day),¹¹.—Stitching pain in the small of the back,¹¹.—Backache, first low down, but passing off she feels it higher up, at 8 P.M., several times, with nausea (twelfth day),⁵.—Drawing pain in the lower part of the back, in the evening (fourth day),⁵.—[250.] In the left loin a shocklike moving downwards, as from a dropping fluid,¹.—Broken feeling around the hips (twelfth day),².—Broken around the hips, feels very tired when standing; feels best when sitting (ninth day),².—**Sacral.** Backache in the sacral region (fifth day),⁵.—Drawing pain in the left sacral region, in the evening, the first day of menstruation (soon after 10 drops of 4th, fifth day),⁵.—Pain, as from weakness, in the sacral region after lying down, in the evening (cured by Nux vom.),¹².

Extremities.—Very weak in all the joints; in the back a kind of lameness; had been walking much the day before (thirteenth day),¹¹.—Lassitude in all her limbs (tenth day),⁵.—Heaviness in all her limbs and dizziness (third day),¹⁰.—Dull, heavy sensation in all her limbs,¹¹.—[260.]

Dull, heavy pain in the arms and legs, and in the left vertex, at 11 A.M. (third day),¹⁰.—Cramps in the soles and palms,¹³.—Drawing and stinging pain in all her limbs as before, after taking cold (seventh day),¹⁰.

Superior Extremities.—Heaviness in the left arm; numbness, especially in the forearm, at 10 A.M. (thirty-second day),².—Dull aching pain in the right arm, going down to the wrist (third day),⁷.—Jumping twitching in the muscles of the left arm, downwards, at 4 and 6 P.M. (fifteenth day),².—Drawing pain in the left arm (first day),⁷.—Drawing in the left arm (fourth day); first in the right, then in the left arm (fifth day),¹⁰.—After coming into a warm room at noon (in December) drawing pain in the left arm, continued all the afternoon and evening, especially in the left upper arm, and worse when coming into a warm room (tenth day),².—**Shoulder.** After working some, she felt violent drawing pain from the right axilla to the sternum, from the third to the sixth rib, in the intercostal muscles, at 9 A.M. (thirteenth day),⁵.—[270.] Drawing pain in the left shoulder at 11 P.M. (second day),¹¹.—Fell on the ice on the twelfth day, and strained the left shoulder-joint; his arm fell, as if paralyzed, could not use it much, very difficult and painful to raise it, much more than was to be expected from the fall; had all through the provings a weakness and drawing pain in the left shoulder-joint,².—Pain along the left deltoid, as from overworking; a sensation of lameness, worse from motion, at 8 P.M. (ninth day),².—**Arm.** Heavy feeling, a kind of lameness in the upper arms (fifteenth day),¹¹.—Twitching in the muscles of the right upper arm (fifth day),¹.—Twitching in the muscles of the back part of the right humerus, and in the right thigh; 5.30 P.M. (second day),⁸.—Pulling-tearing pain along the triceps muscle of the right arm at 7 P.M. (ninth day),³.—Drawing pain in right upper arm, in the evening (fifth day); from the inner side of the humerus, in its lower part, to the middle of the forearm, at 4 P.M. (tenth day),².—**Elbow.** Felt a loud crack in the left elbow on moving (tenth day),⁹.—**Forearm.** Internal trembling of the muscles of the forearm, while holding something,¹.—[280.] Twitching in the muscles of the left forearm at 4 P.M. (nineteenth day),².—Drawing pain in the right forearm towards the wrist at 9 P.M. (fourth day),².—**Hand.** Drawing over the back of the hand, like rheumatism,¹.—Drawing cramplike pain in the palm of the left hand at 5 P.M. (thirty-first day),².

Inferior Extremities.—**Hip.** Drawing pain in both hip joints, with a feeling of lameness afterwards, the pain came by spells; after two drawing pains followed a little rest, then pain again; it is worse in the left joint, at 10 A.M. (seventh day),¹¹.—Stiffness in both hip joints, feeling of lameness, at 5 P.M. (ninth day),¹¹.—Had long ago a fall, injuring the left hip-joint, but for several weeks felt nothing of it at all; as soon as he commenced the proving the same soreness returned as after a fall,².—**Thigh.** Drawing in the right thigh (third day); in the left (sixteenth day),¹¹.—Drawing pain in the outer side of the left thigh at 5 P.M. (sixth day),².—**Knee.** A pain, as if from over-straining the muscles in the bend of the knee (three hours),¹.—[290.] Drawing pain below the left patella, in the afternoon (sixteenth day),².—Dull aching-drawing pain, first in the left, then in both knees, extending down to the feet (fourth day),⁷.—Drawing pain along the inner side of the right patella (eleventh day),².—**Foot.** Exceedingly painful crawling, like that in parts that have "gone to sleep," and prickling in the balls and soles of the feet while sitting; evenings,¹.—A very acute drawing (digging) pain on the top of the foot while it is stretched out (after one hour and a half),¹.—Heels ache, after long stand-

ing,¹.—Prickling, crawling pains in the sole of the foot, while walking or standing,¹.—While sitting in the evening, a fine prickling crawling, almost like a sore pain, in the sole of the foot,¹.—Burning-prickling crawling in the soles, the heels and toes while sitting, particularly burning in a corn on the sole; evening,¹.

Generalities.—If epileptics smell it, it brings on spasms,²⁰.—[300.] Cold rheumatism,¹⁹.—Very weak and general feeling of faintness,¹⁰.—Feels tired all over, in the afternoon (seventh day); feels tired, on standing (ninth day).².—Felt somewhat relaxed all over (second day),⁸.—Inclination to lie down (sixth day),¹⁰.—Prostrated and feverish (second day),¹⁰.—Fainting weakness (seventh day),¹⁰.—Feeling as if she were going to faint, with the headache (twelfth day),¹¹.—Feels very unwell all day,⁹.

Skin.—Redness of the skin, with sensation of heat and stinging,¹⁴.—[310.] Redness of the skin (from external application).³¹.—Large, scarlet-red pimples on the face, on the forepart of the head, and on the neck (seventh day),³.—Two large red pimples on the left cheek (fifth day),¹.—Red pimples on both sides of the alae naris,³⁰.—Skin feels relaxed, soft, and pliable (second day),⁸.—Itching in the beard,².—Itching on the pubic parts,².

Sleep.—**Sleepiness.** A feeling of sleepiness and exhaustion all day and evening; felt a little better in the afternoon and in the air (ninth and tenth days),⁹.—After a good sleep at night, very sleepy all the morning, with frequent yawning (ninth day),².—Felt very sleepy, slept from 6 till 9 P.M., with very lively dreams (ninth day),⁴.—[320.] Sleepy, tired, eyes affected by the light (fifteenth day),².—Was very sleepy, in the afternoon (third day),³.—Sleepy, tired nearly all the time since the proving; never slept well during the night (ninth day),⁴.—Very sleepy all the afternoon (second day),⁷.—Very sleepy all the morning, after a good night's sleep (third day),⁷.—Sleepy and lazy, as if from spring-fever (third day),⁷.—Sleeps well at night, with many dreams, pleasant (second and third days); unpleasant (third, fourth and twelfth days); still many dreams (third week),⁷.—Very sleepy, as if she would lie down (third day),⁵.—Very sleepy towards evening (fifth day); sleepy all the time, in the afternoon towards evening (ninth day),⁵.—**Sleeplessness.** Sleepless in the night; awakens at 3 A.M.; falls asleep again late in the morning (Nux vom. cured),¹².—

[330.] Sleepless till towards morning, falls from one dream into another; dreams of fire, fright, etc. (tenth and eleventh days),².—Did not sleep much at night (fifth and sixth days),⁷.—Cannot sleep, feels nervous and fidgety,¹³.—Wakefulness the latter part of the night (third day),⁸.—Awakened very early (fourth day),¹¹.—Irritable, lazy sleep (fifteenth day),¹¹.—Unrefreshing sleep (ninth day),⁵.—Sleeps well till 2 A.M., then restless, and sleeps with many dreams (of the church), (tenth and eleventh days),⁵.—

Dreams. In the night many dreams (dancing, throwing somersets by an old man), incomplete emissions; wakened up (fourteenth and fifteenth days); dreams of fire (thirty-first and thirty-second days),².—In the night many dreams (fifth and sixth days); frightful (ninth and tenth days),².—[340.] Anxious dreams (third night); not unpleasant (fourth night); anxious (eighth night),⁵.—In the night no refreshing sleep; dreamed all night (second and third days); sleepless, half awake, dreamed all night (sixth and seventh days),⁴.—Wandering dreams; the dreams varied somewhat, cheerful, vivid, and aspiring (third day),⁸.

Fever.—**Chilliness.** (Previous chilly sensibility to open cold air is leaving him), (second day),⁸.—Chilliness, commencing in the lower limbs,

and creeping upwards to the back four or five times, lasting each time ten minutes, in the evening (first day),¹¹.—Creeping chilliness, more about the trunk, evenings in a warm room (sixth day); during the evening (seventh day),⁹.—A chill from below upwards, each time after taking the medicine (seventh day),¹¹.—Chilliness with the headache (twelfth day),¹¹.—Cold shiverings (fifteenth day),¹¹.—Chilly towards noon, 11.30 had first cold feet, then cold hands (sixteenth day),¹¹.—[350.] Very chilly, with faintness and sick headache,¹¹.—Cold hands and feet alternately (fifteenth day),¹¹.—**Heat.** Oppressive heat with the headache,¹¹.—Increased temperature of the body,¹⁴.—Heat in the head, especially in the ears, and slight headache (10'), (second day),².—Heat in the head all day (ninth day),⁵.—Heat in the ears,².—Heat in the face (seventh day),¹⁰.—Heat in the face, red face (second day),¹⁰.—Heat in the face and palms of the hand (one hour),¹.—[360.] Heat in the face and right cheek, and burning heat, with some pain in the temples, at 5 p.m. (tenth day),⁷.—Profuse perspiration,²¹.

Conditions.—Aggravation.—(*Morning*), Frontal headache.—(*Open air*), Pain over left eye.—(*Deep breathing*), Pain in small of back.—(*Laughing*), Frontal headache.—(*During menses*), Sick and irritable.—(*Motion*), Headache; stiffness in neck; pain along deltoid muscle.—(*Noise*), Headache.—(*On rising*), Pulsating pain in vertex.—(*Stooping*), Headache.—(*Talking*), Frontal headache.—(*Walking*), Lameness in back.—(*Walking in open air*), Pain above temples.—(*Warm room*), Pain in left arm.

Amelioration.—(*Leaning against something*), Pain in back.—(*Sitting*), Backache.—(*Touch*), Pressing headache.

ZIZIA.†

Carum aureum, Bentham and Hooker.

Thapsium aureum, Nutt. (*Smyrniium aureum*, Linn; *Zizia aurea*, Koch).

Natural order, Umbelliferae.

Common name, Meadow parsnips.

Preparation, Tincture of the root.

Authorities. (E. E. Marcy, M.D., North Am. Journ., vol. iv, 1855, p. 52). 1, Judge Gray says a gentleman chewed a piece of the root; 2, same, relates the case of a young lady who ate a large root; 3, Dr. Marcy, in a case of epilepsy the patient took more than the prescribed dose; 4, Marcy himself took 5 drops 3d dil. every four hours, until some effects were produced, also two other gentlemen and one lady took the same dilution, and Dr. O. Fullgraff took 1st dil. and tincture; 5, Under inspection of M. E. Lazarus, M.D., Miss J. L., in her twenty-third year, has suffered in years past from dyspepsia, difficulties of kidneys, and from asthma, during two years past chiefly from occasional paroxysms of nervous and sick headache, with pains between shoulderblades, and disorders of uterine function, without serious organic change or displacement; at each inhalation 4 drops 3d dil. were added to 4 tablespoonfuls of water, and inhaled four times a day for six days, for ten minutes each time; during a proving of four days the symptoms were like those she had often observed, but they all ap-

† The old name should be retained, especially as botanists differ in opinions whether it should now be *Thapsium* (Gray), or *Carum* (Bentham and Hooker).

peared in increased severity in the second proving; the actual state of health at time of beginning the second proving was good.

Mind.—Unusual exhilaration of spirits,³.—Exhilaration like intoxication (from the first dilution),⁴.—Exhilaration of all the faculties, followed by a strong desire to sleep,⁴.—Sense of exhilaration, lasting twelve hours, and then succeeded by great depression, which lasted for several days,⁴.—Laughing and weeping moods in alternation,⁴.—Depression of spirits, with disgust of life,⁴.—Depression of spirits, followed by great exhilaration and desire for conversation,⁴.—Irritability, with lowness of spirits and indifference to everything,⁴.—Nervous irritability and depression of spirits, which increase throughout the proving, and on the sixth evening culminate in a paroxysm of self-dissatisfaction, with weeping (after one day),⁵.—[10.] Indolence, with contentment (first day),⁵.—Dreamy, imaginative mood,⁴.—The behavior throughout is quiet, with much apparent suffering and sadness,⁵.

Head.—Giddiness,⁴.—Swimming in the head,⁴; (first day),⁵.—Lightness and pain in the head,³.—Rush of blood to the head and face, with feeling of fulness,⁴.—Affections of the brain and nervous system,⁴.—Sensation of tightness around the head,⁴.—Headache sharp over the right eye, begins slightly on the second day and increases until the eighth. Pulsatilla 6^o, which promptly relieves it on the third day, acts but feebly on the seventh. In its full development on the seventh day the headache is grievous, with nausea, inclination to bilious vomiting, need to lie still in a darkened and quiet room; light, noise, and jar aggravate; differs from the usual type only in the pain being permanent on the right side, instead of shifting. It abates twenty-four hours after discontinuing the inhalations, leaving much sensitiveness, a bitter taste in the mouth, and a susceptible and feeble stomach for several days longer. While inhaling the headache was worse in the evening; after stopping the inhalations its aggravations occurred in the morning, in accordance with the constitutional predisposition. When at its worst the pain descends behind the right ear into the neck; it leaves the lips parched as from fever. It is associated with severe backache, between or at the borders of the shoulderblades; the forehead is affected by a sharp cutting pain by the jar of coughing; on the ninth day after the cough pain had ceased in the chest,⁵.†—[20.] Sensations of tightness around the forehead and at the back of the head,³.—Severe pain in the right temple, with nausea,⁴.—Pressure upon the top of the brain,⁴.—Acute aching pain in the whole left side of the head, increased by light or noise,⁴.—Dull pains in the occipital region, extending down the muscles of the neck,⁴.

Eye.—Redness of both eyes,⁴.—While both eyes exhibit a diffused injection, the right eye is more particularly the seat of painful and quite unaccustomed symptoms,⁵.—Shooting pains through the orbits,⁴.—Sharp pains in the right orbit, increased by moving the balls, by stooping or stepping,⁴.—Eyelids adhere together on rising, in the morning, in consequence of a yellowish, mucopurulent secretion,⁴.—[30.] Styte upon the right lid,⁴.—A styte developed in the middle of the upper lid, and gave so much pain on the fourth day that she sought relief from an antidote, *Carbo animalis*; four doses at hour intervals relieved promptly, and in twenty-four hours the styte

† This group is suspected to be sympathetic with the uterine, yet not wholly so, as there is a hereditary predisposition to headache, from the father's side, from which only two members of a large family are exempt.

had vanished; still the right eye continues burning, smarting, and weeping, and both eyes continue on the fifth day after stopping the inhalation very weak and painful if they are used at night,⁵.—Smarting of the lids,⁴.—Eyes watery,⁴.—Eyes sensitive to light,⁴.

Nose.—Nasal catarrh, with sneezing and coughing, from the first inhalation,⁵.—Nasal discharge of thick mucus,⁵.—Catarrhal, asthmatic, and pleuritic maladies,¹.—Obstruction and soreness of the right nostril, which is painful to touch,⁴.—The right nostril only is affected, it becomes sore and tender to the external touch; consociated with this was observed a diffused injection of the mucous membrane covering the arches of the pharynx, with the ordinary sensations of catarrhal sore throat; the conjunctival membrane exhibited a similar diffused injection,⁵.

Face.—[40.] Face pale and puffy,⁴.—The face exhibits throughout the proving a pale puffy state, quite morbid,⁵.—Redness of one cheek and paleness of the other,⁴.—Boring pains in the cheek-bones,⁴.—Dull pains in the jaws,⁴.—Painful tenderness over the lower jaw-bone, an inch below the root of the ear, observed only on the seventh day,⁵.

Mouth.—Redness of the tongue, with unusual sensitiveness to cold and warm drinks,⁴.—Tongue covered with a whitish fur,⁴.—Yellow fur upon the tongue, and oppressed respiration,⁴.—The tongue was broad, furled in the middle and reddened at the tip and sides,⁵.—[50.] Dryness of the mouth,⁴.—Bitter taste,⁴.—After the sick headache there was a bitter bilious taste in the mouth (seventh day),⁵.

Throat.—Increased secretion of mucus in the throat,⁴.—Slight redness of the tonsils and palate, with soreness of the throat,⁴.—Inflammation of the mucous membrane of the pharynx,⁴.

Stomach.—Appetite and Thirst. Craving for acids and stimulants,⁴.—Loss of appetite,⁴.—The appetite diminished as the drug illness became more and more serious,⁵.—Thirst,⁴.—[60.] Thirst increased,⁵.—

Nausea and Vomiting. Nausea,⁴.—Nausea and vomiting, immediately,¹.—Acid and bilious vomiting,⁴.—Violent vomiting, soon; the speedy discharge of the poison by vomiting enabled her to resist the toxical influence and regain her usual health in a few days,².—**Stomach.** Stomach sensitive to touch,⁴.—Pressure occasioning nausea and faintness,⁴.

Sexual Organs.—Male. Involuntary emission for two nights in succession, while taking the drug,⁴.—Excitement of the male genital organs,⁴.—In one instance, where great lassitude and prostration had long been habitual after connection, the drug appeared to effect an entire change for the better,⁴.—[70.] Sexual power enhanced,⁴.—**Female.** Uterine affections characterized by increased vascular and nervous excitement,⁴.—Bland and profuse leucorrhœa,⁴.—Acrid leucorrhœa,⁴.—*Leucorrhœa commences on the second day and continues, slight as to quantity, and at first acrid; afterwards more bland and copious; this is a constitutional disorder, and was observed during both provings; it ceased on the seventh day,².—Profuse menstrual discharge for one day, followed by an acrid leucorrhœa,⁴.—The catamenia appeared in due time, but ceased after only twelve hours; this is altogether unusual with the prover,⁵.—Sudden suppression of the menses,⁴.

Respiratory Organs.—Larynx and Trachea. Roughness in the upper portion of the larynx when inspiring or coughing,⁴.—Raw and smarting sensation in the larynx from coughing,⁴.—[80.] Sensitiveness of the trachea to touch,⁴.—**Cough and Expectoration.** Dry cough, with shooting pains in the chest,⁴.—Tight cough caused by taking a deep inspiration,⁴.—Tight cough, excited by dryness of the larynx,⁴.—Short, dry

cough, attended with severe stitching pains in the right side, and a sense of suffocation,⁴.—The cough is hard, dry, and short, with stitching pain on the right side, from the region beneath the sixth rib down as far as two inches below the xiphoid cartilage,⁴.—**Respiration.** Respiration accelerated and oppressed,⁴.—Oppressed respiration and yellow fur upon the tongue,⁴.—Asthmatic respiration, with inability to retain the recumbent position,⁴.—She cannot draw a full breath, without severe pain, in the latter days of the proving from the fourth day; worst on the seventh, and sensible on the tenth; it catches her about the sixth rib in front, and pierces through to the back, like the other pains, confined to the right side,⁵.—[90.] Asthmatic group, not very severe or remarkable by other persons, but recognized by the prover as a reproduction of symptoms which have been latent for years. It is now six years since the critical acme and sudden disappearance of a chronic asthma. Since then she remembers only one short attack, about two years ago, merely a fit of half an hour. After each inhalation she felt almost stifled for about ten minutes, although the inhalation itself was made easily and freely. *This annoyance augments as the proving proceeds, and becomes more constant, though less severe, since discontinuing the inhalations.* It is still felt on the thirteenth day, although faintly. Its seat is central, beneath the sternum on a line with the axillæ. There is no audible wheezing, yet the same sensations in the chest as during her former fits of asthma; sometimes so serious as to keep her up for hours at night,⁵.

Chest.—The pleural symptoms are severe, painful, regularly developed from the first inhalations, reach their acme on the seventh day, and are still very troublesome on this, the tenth,⁵.—Bruised feeling in the muscles of the chest,⁴.—Pressure excites pain in the intercostal muscles,⁴.—Over the xiphoid cartilage and at circumscribed spots on each side about the size of a fifty-cent piece, two inches below, there is painful tenderness to the external touch,⁵.—Dull, aching pains under the right scapula,⁴.—Severe shooting pain, extending from the front part of the thorax to the scapula,⁴.—Sharp pains, extending from the sides of the chest to both shoulder-blades,⁴.—Severe stitching pains in the chest, accompanied by feverish symptoms,⁴.—Pleuritic stitches in the right side, much increased by coughing, or taking or attempting to take a long breath,⁴.

Back.—[100.] The dorsal symptoms are painful, perhaps sympathetic with the uterine sphere; they begin to be felt on the second day of the proving, increase in severity until the seventh evening, and are still felt on the thirteenth day. They are ordinary with her at any time when her vitality is depressed, as by prolonged nervous headaches or other causes; she has no reason to expect them from any such cause before commencing the Zizia proving. Their seat is at the posterior lateral margins of the scapula, generally worst on the left side; during the inhalations it was the right side which chiefly suffered; since leaving off it is the left. The pains are aching, smarting, and stinging, when worst there is also aching in the small of the back,⁵.—Dull pains in the loins, increased by movement,⁴.—Smarting-burning pain in the small of the back,⁴.

Superior Extremities.—Lameness in the muscles of both arms, from the shoulders to the elbows,⁴.—Pricking sensation in the right arm, with slight diminished sensibility of the part,⁴.

Inferior Extremities.—Dragging sensation in both hips,⁴.—Unusually tired feeling of the legs, after the slightest muscular exertion,⁴.

Generalities.—Increased physical strength, with inclination for

muscular exertion,³.—The general aspect and sensations of the prover were those of a grave and chronic deterioration of health,⁵.—White and puffy appearance of the whole body,⁴.—[110.] Surface of the whole body paler than natural,⁴.—Face and ankles œdematous,⁴.—Convulsions, epilepsy,⁴.—Spasms, swooning, and convulsions,².—Spasms, general convulsions, and fainting fits, immediately, which terminated in death at the expiration of three hours,¹.—Spasmodic movements of the muscles of the face and extremities,⁴.—Great desire to move about, with apparent increase of strength, but slight exercise causes fatigue,⁴.—Sensitiveness of the entire surface of the body to the touch,⁴.—The pains of Zizia have been fixed; those to which the prover is at other times subject are oftener shifting,⁵.—Pains increased by movement, noise, light, or contact,⁴.—[120.] Most of the functional disturbances persist after ceasing the inhalations, and very generally abate during fifteen days,⁵.—The exacerbation assumed the evening type. The morning is, on the contrary, the time at which the prover's constitutional disorders are generally most severe,⁵.

Skin.—Itching pimples upon the forehead, wrists, and legs,⁴.

Sleep.—Drowsiness,⁴; (first day),⁵.—Drowsiness, with a sense of lassitude and fatigue,⁴.—The sleep is sound until the sixth night, when it is prevented by pains,⁴,⁵.—Spasmodic twitching during sleep,⁴.—Talking during sleep,⁴.—Sleep disturbed by unpleasant dreams,⁴.

Fever.—**Chilliness.** Chilliness and heat, alternating with faintness, nausea, pain in the right temple, redness of the eyeballs, dry and red tongue, and thirst for cold water,⁴.—[130.] Chilliness, accompanied with spasmodic twitchings of the muscles of the face and upper extremities, followed by fever,⁴.—**Heat.** Fever, with headache, pain in the back, thirst,⁴.—Feverish symptoms, accompanying severe stitching pains in the chest,⁴.—Severe sense of heat and fulness in both cheeks,⁴.—Flushed cheeks, hot head, visible pulsations of the carotid and temporal arteries, coldness of the hands and feet, drowsiness and irritability,⁴.—Redness and heat of the cheeks (after 1 drop of 3d dil.),⁴.—Hot flushes in the face and head, followed by perspiration,⁴.

Conditions.—**Aggravation.**—(*Evening*), Headache; symptoms.—(*Coughing*), Pleuritic stitches in right side.—(*Deep breath*), Pleuritic stitches in right side.—(*Light*), Pain in left side of head; pains.—(*Motion*), Pain in loins; pains.—(*Moving eyes*), Pain in right orbit.—(*Stepping*), Pain in right orbit.—(*Stooping*), Pain in right orbit.

SUPPLEMENT.

APRIL, 1879.

SUPPLEMENT.

ABIES NIGRA.

Authority. 4, Contributed to this work by Dr. J. B. Bell.

August 10th, at 11.30 p.m., I took ten drops of 18th potency; after about half an hour I felt a severe pain in or about the left meatus auditorius externus, which continued to increase for five minutes or more, and then gradually subsided. The pain was quite peculiar and different from anything I ever before experienced. This was followed by slight dyspnoea, which was increased by lying down. It soon subsided, however, and I slept immediately after retiring, which I think was soon after midnight. I felt no symptoms on the following day, and at 10.30 p.m., I took 10 drops more, and retired in about half an hour. Soon after lying down I felt a choking suffocating sensation, as though my lungs were compressed, so that I could not fully expand them. (I had experienced a similar sensation several years ago, when laboring under some disorder of the chest.) There was some increased action of the heart; it did not beat faster than usual, but harder, that is, the volume of blood which entered it seemed to be greater. The pain in the meatus of the left ear was not so marked as on the evening previous, but still it was plainly present. It seemed on this occasion to flit about, not settling down on a single point. As on the evening previous these symptoms continued for fifteen or twenty minutes, and then subsided and did not return. On the succeeding days I took 5 drops three times a day, but did not develop any new symptoms. The symptoms before mentioned were present, but were not so marked as on the former occasions. August 18th I took 6 drops of the 9th potency, in the evening, but did not perceive any symptoms. The next evening I took 12 drops of the 9th, and developed in a marked degree the same symptoms as after 10 drops of the 18th. Nothing new, however, appeared. I followed this up by taking 6 to 15 drops of the 9th, but I think I got the plainest results from about 12 drops of this potency. I have taken various potencies from the tincture up to the 30th, and have invariably confirmed the proving, to wit, pain in the left external meatus, heavy slow beating of the heart, dyspnoea, and, finally, sharp cutting pains in the heart. This last was very severe from the 30th, so severe that I was obliged to take Aconite to antidote it. I have always got the most marked symptoms from the high potencies, or at least the higher they have been the more marked have been the symptoms.⁴

ABSINTHIUM.

Authority. Dr. Th— Ch. Challand, Etude exper. et clin. sur. L'Absinthisine et L'Alcoolisine, Paris, 1871; 2, general statement; 3 to 13 detailed cases.

Mind.—Delirium, with trembling of the hands and feet,⁹.—After drinking Absinthe began to scream, called out, with frothing from the mouth; convulsions, with tetanic spasms like electric shocks,⁷.—Terrifying hallucinations,¹¹.—Hallucinations,⁹.—Terrifying hallucinations of persons pursuing him,⁶.—Terrifying hallucinations, he sees all kinds of animals, cats and rats of all colors, grotesque animals, fancies that he is pursued by soldiers, etc.,⁴.—Hallucinations of vision and of hearing, that he is pursued by imaginary enemies; hallucinations of various kinds, of naked women, etc.,⁵.—Visions of animals,¹⁰.—[60.] Fear of assassination,¹⁰.—Loquacity,⁹.—Irritability,³.—General mental incoherence,⁶.—Memory feeble,¹¹.—Unconsciousness in convulsions,³.—Coma, followed by death,⁵.†

Head.—Frequent vertigo,⁸.

Eye.—Eyes brilliant,³.—Dilated pupils,⁴.—[70.] Pupils unequally dilated,³.

Face.—Pallor of the face,³.

Mouth.—Trembling of the tongue,⁵.—Fibrillar twitching of the tongue,⁶.—Incoherent speech,³.

Stomach.—Loss of appetite,³.—Symptoms of indigestion, with at times vomiting,³.—Oppression of the epigastrium and chest,¹³.—Liver enlarged,⁸.

Stool.—Constipation,³.

Urinary Organs.—[80.] Urine red, albuminous,³.

Respiratory Organs.—Cough, with some expectoration and crepitant râles (due very likely to some œdema of the lungs dependent, on the albuminuria),³.—Voice feeble, speech hesitating,³.

Heart and Pulse.—Beat of the heart irregular,³.—Pulse rapid,⁹.

Extremities.—Trembling of the hands,⁵; especially in the morning,³.—Pain along the sciatic nerve,⁸.

Generalities.—Attacks resembling hysteria,¹³.—Hysterical spasms; general rigidity of the limbs, followed by irregular convulsions, accompanied by acute sensation of oppression, obliging the patient to put the hand to the chest, as though there was a heavy weight there; at the same time he tossed about, cried out, and wished to die; the convulsive spasm was generally succeeded by a momentary calm, and so on in alternations for more than an hour,¹².—Epileptiform spasms, followed by delirium,⁶.—[90.] The effects observed from intoxication by Absinthe are dependent upon disturbance of motility. These are convulsive phenomena. The epilepsy develops itself in a relatively short time, the reverse of which is true of the effects of Alcohol. The epilepsy of Absinthe differs again from the epilepsy of Alcohol in its character. While the epilepsy of Alcohol becomes analogous to true epilepsy only at a very advanced stage of the disease, that of Absinthe assumes at once and completely all the characteristics of that disease. The person becomes pale, loses consciousness, falls,

† The autopsy demonstrated subpericranial ecchymosis, very recent meningeal hemorrhages, blood black, liquid, very abundant false membranes on the inner surface of the dura mater, superficial inflammation of the left hemisphere of the brain, pulmonary emphysema, heart fatty, flabby, etc.

sometimes utters cries, the face is convulsed ; this is followed by tonic convulsions, with tetanic rigidity of the limbs and of the trunk, which is raised up, followed by clonic convulsions of the limbs ; the face becomes violet and cyanotic, respiration rapid, i. regular, stertorous, froth from the lips, sometimes bloody, the individual bites the tongue, at last falls into a comatose state, with stertorous respiration, which lasts a longer or shorter time. After the person recovers consciousness he seems stupid, dazed, and recollects nothing of what has passed. Sensibility is very obtuse, and during the attack anæsthesia is complete. Sometimes the epilepsy of Absinthe is not characterized by a complete attack, but has only vertigo or loss of consciousness ; symptoms which are found in true epilepsy. The third characteristic of the epilepsy of Absinthe is its short duration. The violent attacks cease completely as long as the patient remains sober, but when he begins to drink again he has new premonitions of an attack, which is not slow in coming on. There may be one attack or several during the day or following days, but usually there are three or four. Is this epilepsy of Absinthe the effect of acute or chronic intoxication ? We believe that it is an acute symptom manifested during the course of chronic intoxication, found more often in those who drink to excess habitually ; its appearance is never delayed after the person has begun to drink Absinthe to excess. After drinking for six months or a year, some day the person drinks to excess and the spasms come on. Acute alcoholic mania or delirium tremens is equally an acute symptom during chronic alcoholism, and the epileptiform spasms of alcoholism show themselves at a very advanced period. Persons who are attacked by the epilepsy of Absinthe, drink generally eight, twelve, or even twenty glasses of Absinthe a day. Others drink three or four, and are awaiting the attacks. A circumstance of great importance is the predisposition. We find a large number of drinkers who have never had spasms, or only slight symptoms. There are others, on the contrary, who are attacked on their first excess. A large number of person habitually sober, who drink occasionally a glass of Absinthe, become affected by a kind of intoxication, with pains in the head and sensation of constriction in the temples, and they therefore rarely drink Absinthe. Such persons tolerate, without the least trouble, a large quantity of Alcohol, and experience no symptoms from it. This is a very common occurrence, but difficult to explain, unless we admit the presence of a special agent in Absinthe. Dr. Voisin, in *Nouv. Dict. de Méd. et de Chir. Prat.*, art. *Epilepsie*, 1870, p. 604 et 628, says that the epilepsy produced by wine, alcohol, etc., is usually characterized by long intervals between the attacks, the epilepsy of Absinthe by the very large number of attacks in a very short space of time. I have reported a case of epilepsy of Absinthe in which there were from one hundred and fifty to two hundred attacks in twenty-four hours. Drs. Marce and Magnan have observed the same effects,²—Epileptic spasms, with cyanosis, frothing from the mouth, etc.,¹⁰—Epileptic attacks, lasting twenty or thirty minutes, after which the hallucinations continue,⁴—Epileptic spasms repeatedly,⁵—Was suddenly seized with a convulsion, during which he lost consciousness ; there were convulsive movements of the limbs, face distorted, frothing from the mouth, biting the tongue,³—Convulsions and violent color of the face, frothing from the mouth, etc.,⁶—Irregular intermittent spasms, without absolute loss of consciousness,¹³—Very great agitation,⁶—Trembling,⁴—General trembling,¹⁰—[100] Trembling of the lips, hands, and tongue,⁶—Trembling of the limbs, lips, tongue,³—Symptoms of general paralysis,⁹.

—Very marked anæsthesia,¹³.—General exaltation of sensibility,³.—General anæsthesia,⁸.

Skin.—Eruption of furuncles over the whole body.⁹.

Fever.—Feverish,⁴.—Profuse sweat,⁹.—Very profuse perspiration upon the face,³.

ACETIC ACID.

Authorities. 6, Dr. Gmelin, Inaug. Diss., 1838 (Hygea, 10, 392), took frequently about $\frac{1}{2}$ ounce of pure wood spirit, diluted with more or less water, the action always being the same; 7, A. H. David, M.D., Brit.-Amer. Journ. of Med. and Phys. Sci. (Bost. Med. and Surg. Journ., vol. xxxvii, 1847, p. 134), a woman took a quart of common vinegar; 8, Lan-derer, Med. Gaz., from Heller's Archiv (Lancet, 1847 (2), p. 162), a wet-nurse was in the habit of drinking large quantities of Acetum rosarum; 9, Mr. Birkett, Lancet, 1867 (2), p. 98, a man while drunk took 2 or 3 ounces Acetic acid; 10, C. Hering, M.D., Am. Journ. of Hom. Mat. Med., 1875, p. 222, effects on a young German engaged in a vinegar factory for a little over a year; 11, E. W. Berridge, N. E. Med. Gaz., 1874, p. 401, effects of drinking vinegar; 12, same, Am. Journ. of Hom. Mat. Med., vol. ix, 1876, p. 245, second case of effects of tasting vinegar.

It had a peculiar burning taste, and caused a similar taste in the throat. Soon afterwards there was a disagreeable burning in the epigastric region, followed by efforts to vomit, profuse secretion of saliva, and eructations; these lasted about two hours, and gradually disappeared, without causing additional disturbance. Even when taken in small quantities, so that it did not cause a burning taste, yet it caused secretion of saliva, some nausea, and eructations from time to time. There were also weariness and inclination to perspire.⁶.—Covered with cold perspiration, and trembling from head to foot, and apparently alarmed at everybody and everything about her. Her breathing was very laborious and hurried; her countenance perfectly wild, and the pupils dilated; the tongue was dry and cold; pulse 96, and full; the abdomen much distended, with extremely acute pain at the scrobiculus cordis, so much so that the slightest pressure there caused her to shriek out. She did not know any one about her, not even her own children, nor had she any recollection of anything that had happened from the time of taking the vinegar.⁷.—The milk became impoverished, it was of a specific gravity 1.002, bluish-colored, transparent, had a strongly acid taste, and a well-marked odor of Acetic acid. On analysis he found it to be deficient in casein and butter. The child gradually drooped, had diarrhoea, and finally died of marasmus. The woman herself, in the course of a few weeks, became pale, sickly, lost flesh, and suffered from chronic hæmorrhage.⁸.—Slight collapse and laryngeal obstruction, which was so severe as to lead to cessation of respiration, but was at once relieved by tracheotomy. Some six hours later there was inability to swallow, with great thirst.⁹.—Soon after entering the factory, he lost his usual good appetite, although he remained otherwise well. He had often to work in the night, and slept during the daytime. His sleep now became very much broken, without any particular reason. If he ate something he could sleep on. At a later period he could not lie on his back, and felt as though the abdomen would sink in, which caused laborious breathing. He rested better in abdominal position. He could not drink anything cold on account of its lying heavily in the stomach and causing pressure. He had to give up

drinking beer, and got an aversion to cold victuals. His florid complexion disappeared; he grew pale and emaciated. Vegetables, of which he was always fond, now disagreed, with the exception of potatoes. Bread disagreed, and butter still more; he had an aversion to all salted things. Food tasted right, but would not go down; he therefore had to eat very slowly. Of meat he could eat sparingly; cheese and eggs agreed. He frequently partook of mulled beer and eggs, which warmed him up, and caused him to perspire, after which he felt easier, but could not sleep. After taking some bitter tonics his stools became variable. The appearance of the tongue was normal. He grieved much about his sickness, and felt considerable anxiety about his children. He sighed often, and now and then was forced to take a deep breath, which relieved. Going up stairs was very difficult,¹⁰.—Whenever she takes vinegar her face gets red and feels hot, with perspiration on it,¹².—Cold perspiration on forehead,¹¹.

ACONITINUM.

Authorities. 3, Dr. Bethune, Boston Med. and Surg. Journ., vol. liii, 1855, p. 370, in a case of amaurosis, a solution of $\frac{1}{8}$ gr. to 1 oz. distilled water was used; 4, E. Hottat, L'Aconitine et de ses Effets Phys., Paris, 1863, effects on himself and two others of a solution applied to the skin; 5, same, effects of doses up to 3 milligrams taken internally; 6, same, detailed account of experiment; (7 to 10, John Harley, M.D., St. Thomas's Hosp. Rep., vol. v, 1874, p. 165), 7, observations of Chas. W., æt. fifty-four years; 7*a*, same, took $\frac{1}{100}$ gr., and did not rise from his chair for three hours; 7*b*, same, took $\frac{1}{100}$ gr.; 7*c*, same, took $\frac{1}{50}$ gr. at intervals of three days, at 9 A.M.; 8, experiments on men, took doses of $\frac{1}{5}$ to $\frac{1}{50}$ gr.; 9, Frederic G., æt. twelve years, took $\frac{1}{100}$ gr. repeatedly at intervals of three days; 10, effects of subcutaneous use.

Eye.—Immediately swelling of the lids, great redness, lachrymation etc., of the eye to which it was applied, and also great contraction of the pupil.³

Pulse.—Pulse 66 (before experiment); 60, unchanged, somnolency coming on (after forty minutes); pulse 58; respirations 16. He slept for twenty minutes; a general glow pervaded the body (after one hour and a quarter). Pulse 56; respirations 16. The glow and somnolency continued, and he had dozed several times (after three hours),^{7a}.—Pulse 60 (before experiment); 54, unchanged in volume and power (after one hour and a quarter); 52, of initial volume and power; the respirations 16; natural; the pupils very slightly dilated? He felt warm and dozed much after the medicine (after three hours),^{7b}.

Generalities.—It caused a sensation of heat and burning, accompanied by lancinating pains and prickling, followed after a time by a sensation of heaviness and numbness of the parts affected; these parts seem compressed by a heavy weight; the skin seems raised up and contracted by the muscles beneath; its color is not affected. There is anæsthesia. These symptoms last several hours, sometimes the whole day, but are never followed by general symptoms.⁴.—Soon experienced over the buccal mucous membrane a sensation of acidity and heat, which spread rapidly to the throat, and after a time to the stomach. There soon followed burning and numbness of the lips, tongue, and pharynx; at the same time there was very abundant salivation. To these local effects are joined general symp-

toms of malaise, feebleness, heaviness of the head, and nausea, frequent yawning, general oppression, and very marked loss of muscular power. Pulse accelerated, but to a moderate degree. The skin becomes moist. There are noticed pricklings in various parts of the body, particularly on the face and extremities. After a variable time the prostration increases, is associated with headache, lancinating pains in the face, prickling following the course of the nerve; frequent nausea; at times accompanied by vomiting. Loss of muscular power becomes very marked, formication more pronounced when quiet. The limbs seem numb, the face sensitive and swollen, pulse falls; respiration becomes difficult, the sensation of burning in the throat becomes painful, and there follows profuse perspiration. After awhile there is general prostration. One experienced a bruised feeling in the limbs, and difficulty in grasping objects; the least effort exhausts and enervates; respiration is slow and deep; the pulse is remarkably lowered. The intellect is not affected, and there is no sleepiness. The pupils are dilated, but the dilatation is far less marked than that produced by Atropia; they contract slowly under the influence of a bright light. These symptoms last ten or twelve hours; little by little the pulse rises, respiration becomes freer, the vital powers and the appetite return, in a word, everything resumes its natural function. The symptoms which persist to the last are the dryness of the throat, the heaviness of the head, and the extreme weariness.⁵—The following is a detailed account of an experiment: At 8.30 A.M., the pulse beating 68, 6 granules of Aconitia, $\frac{1}{2}$ mg., were taken. In ten minutes sensation of heat in the stomach. In twenty minutes general malaise, yawning, eructations, nausea. In thirty minutes marked heat in the stomach, pulse 76, sensation of burning in the tip of the tongue, muscular feebleness, nausea. In forty minutes, burning of the lips, throat, and whole mucous membrane of the mouth. In forty-five minutes prickling in the face and forearms, pulse 85; after an hour, oppression, headache, sensation of dryness and burning in the throat very pronounced, salivation. In an hour and a half, general depression, very great muscular feebleness, sweat, nausea, and vomiting, pulse 68. After two hours and a half, prickling in the face, which seems swollen and sensitive, also in the forearms and hands, which seem numb and heavy; pulse 60. In three hours and a half respiration impeded, pain in the temple and along the course of the infraorbital nerve; profuse perspiration, pupils not dilated, sensation of heat in the throat and over the larynx, soon disappearing; the eyelids seem numb, and there is abundant salivation, complete loss of appetite and some nausea. In four hours and a half, same symptoms, complete prostration of all the forces, gait heavy, general enervation, slight tendency to sleep. After six hours and a half, headache, with constriction of the temples, pupils dilated, respiration difficult, pulse 52. After eight hours and a half, same symptoms, sensibility diminished, especially on the hands and cheeks; intellect free, no sleepiness. In ten hours and a half, symptoms begin to improve, head is free, pricklings diminished, pulse 60. In eleven hours and a half there is noticeable improvement; respiration is easier, the dryness and burning heat of the throat less marked, there is feebleness and general lassitude, pupils continued dilated, pulse 68. In twelve hours, sleep easy, without restlessness and without dreams. The next day on waking there is no trace of the effects of the drug.⁶—[50.] The $\frac{2}{100}$ of a grain of Aconitia taken by the mouth at intervals of three days, always caused a slight tingling in the mouth and face, coming on within an hour, and lasting for two or three hours. On another occasion, after

the $\frac{1}{150}$ of a grain, a faint glowing feeling in addition was perceptible throughout the body, and there was a little somnolency. On another occasion, the $\frac{1}{150}$ of a grain converted the glowing into a numbing glow: a comfortable feeling, as if he were going off to sleep, and if he did not move about, actual somnolency. These effects attained their maximum two hours after the dose; he felt warmer while they continued, and there was at the time and afterwards some difficulty in voiding urine.⁷—The effects were uniform. The medicine “upset him very much, all day, he felt languid and sleepy; he could not hold up the head or keep his eyes open.” He was giddy and could not walk across the room without help; the vision was hazy; the erect posture induced nausea. He could not eat much on the medicine days, on account of a difficulty of swallowing, and pains in the back of the neck and behind the jaws of the parotid regions, so that in eating he had to press the back of the neck with his hands. A glowing tingling feeling pervaded the body, and there was a burning feeling in the gullet, “as if a hot coal were there.” The tingling in the mouth and face came on within half an hour, the somnolency after an hour and a half or two hours. At first he slept for an hour, but afterwards the sleep was dreamy and broken. The giddiness, dimness of vision, and the muscular weakness were most marked between the sixth and tenth hours. There was always some dysuria, and occasionally retention with hypogastric pains. Nausea was generally a prominent symptom, and the pain in the neck often remained until the next day.⁸—General numbness and tingling, but most marked in the face and throat; nausea, giddiness, somnolency, and muscular weakness,⁸—After three-quarters of an hour a tingling-prickling sensation running up the legs to the spine and head, and tingling of the fingers, much giddiness and somnolency, but the sleep was disturbed by frequent wakings. After two hours he was unable to walk or even stand without great exertion, and on rising from the recumbent posture he was unable to see for a minute, and there was nausea. The effect lasted for seven or eight hours, after which he slept comfortably, and felt quite well the next day.⁹—Considerable local burning, pricking, and smarting,¹⁰.

ACONITUM CAMMARUM.

Authority. Prof. C. D. Schroff, Einiges über Aconitum in Pharmakognostischer, Toxikologischer und Pharmakologischer Hinsicht, Geschrieben in December, 1853.† Proving of the alcoholic extract of the root; effects of 0.1 gram.

The first symptom is rumbling in the abdomen with eructations, after which the head becomes dull, there appears a tense drawing sensation along the course of the trigeminus, which then gives place to a shooting, wandering, very frequently interrupted, and finally constant pain. The pulse begins to fall, to become irregular, small, and weak, the dulness of the head increases, associated with weakness, prostration, and sleepiness, and a dull pain within the skull. The pupils are at first unusually mobile, varying in size, but afterwards become permanently dilated, associated with dim

† Having obtained the original work, we deem it of sufficient interest to give these experiments anew and in detail, which will be more satisfactory and complete than the meagre statement taken at second hand found in vol. i.

vision, so that she is unable to look at a strongly illuminated body without blinking, and both near and distant objects become confused.

About forty minutes after the dose, there appeared a peculiar prickling sensation on the tongue, which was at first quite similar to the effects of pepperminut; it spread over the lips and posterior portion of the mouth and fauces, then extended to the tips of the fingers and toes, and over the face, and finally over the whole body. At the same time there was increased secretion of saliva, the skin became cold, dry, and rustling. The crawling continued to increase, and caused a most wonderful subjective sensation of distortion of the face and the extremities, and constriction of the body. This was associated with uneasiness; there seemed to be a tickling which compelled constant motion. In an even temperature it diminished, but increased on changing from a cold to a warm atmosphere, or the reverse. The headache and dulness of the head gradually diminished after two hours. The prover experienced most unusual weakness, weariness, oppression, and anxiety, was frequently obliged to yawn. Respiration constantly became more difficult and slower. This was associated with a sensation as if the neck and chest were constricted. The pulse constantly became more and more irregular, and fell below one-half of the normal, frequently intermittent, and at last assumed a dicrotic type. The weakness reached such a degree that the prover could not stand up, but was obliged to keep a horizontal position. The anxiety increased, was associated with apathy, indifference to the whole world. The beat of the pulse and heart at times omitted for several seconds; respiration became more a catching for breath. Skin constantly dry and icy cold. Taste and sensation diminished. On the places where the crawling had ceased there set in a sensation of fuzziness, as in a finger which has been tightly laced by a string; *subtulus tendinum*; involuntary stretching of the limbs. Constant nausea and efforts to vomit, and at last, after five hours, repeated vomiting; after this the whole condition essentially improved. Pulse and respiration became more rapid, regular, the anxiety and depression decreased, and the whole body became warmer, and the crawling ceased entirely, but instead of it there remained a certain insensibility of the skin, a kind of fuzziness. The head was no longer painful and dull, but rather empty and confused, as if intoxicated by sleep; the weakness remained, so that on attempting to rise the prover became hot and dizzy, and there were flickering before the eyes, roaring in the ears, pain in the head and face, nausea, and such weakness that he was obliged to lie down again to avoid falling. The whole night was passed in this condition without sleep, only about 4 A.M. he fell into a slumber lasting two hours. The whole next day the prover went about as if half asleep; his memory and power of attention completely disordered, pupils dilated, pulse at one time rapid, at another slow. After every mental or physical effort there appeared dulness of the head and face. The tongue in the morning was coated, the taste pasty, the whole skin cold and dry, diuresis very much increased.†

Heinrich's proving of the same dose showed so many peculiarities that I give it by itself.—SCHROFF.

† The symptoms given here appeared with the greatest constancy in three provings of the root, both old and young, before and after flowering, in doses up to 0.1 gram, and caused in the prover such distressing symptoms that he did not dare to increase the dose.

Heinrich's pulse was at first a little rapid; after twenty minutes there appeared eructations, scraping in the throat, dulness of the head, dilatation of the pupils with dimness of vision, head heavy and confused. After forty minutes the crawling began, first upon the tongue and lips, then over the face, whence it spread over the body. Together with the crawling there was observed an itching in the skin, and a drawing up of the face; the skin was dry. After an hour the headache and faceache began; the headache was aggravated by bending the body forward; it afterwards became associated with ringing in the ears and vertigo. The pulse became slow, fell from 62 to 51 within two hours, and was so small, weak, and intermittent, that it was very difficult to count. Respiration was difficult, associated with a sensation as if the chest was constricted. Secretion of saliva increased. On going home there appeared very great weakness, and after walking about pain in the joints of the elbows, knees, and hips; this pain was relieved, but not entirely removed by pressure. After about four hours the pains in the head and face became very violent and spread over the rest of the body. There followed a stool. The crawling increased and caused an inexplicable uneasiness, so that he walked almost the whole night up and down the room, as if crazy. The skin was dry and cold, respiration difficult, rapid, the pulse very slow (40). Violent eructations, efforts to vomit. Spasmodic constriction of the stomach and contraction of the abdominal muscles. On walking about he had vertigo, roaring in the ears, and great sensitiveness to light. After the crawling had ceased the epidermis of the face began to desquamate. Towards morning he lay down on account of great weakness, soon fell asleep, and awoke warm and in perspiration. At this time he had erections and emissions, but without voluptuous dreams. The morning after the proving he seemed quite well, but at the college, where he was obliged to stand, he became very weak, and the pains in the joints returned.

In one proving, from the old root, some blisters developed on the skin of the lower extremities, filled with serous fluid, and were very painful. The memory was very weak. Appetite diminished, voice hoarse and rough. Power of touch diminished, so that he could not distinguish small objects by the feeling. This action is also different from that observed by Dworzak, as it was less intense but there was more variety. The rumbling in the abdomen was much less, but the itching of the skin, desquamation of the epidermis, pains in the joints, perspiration, emissions, eruption of vesicles, extension of the pain in the face over the rest of the body, were peculiar; on the contrary he had no vomiting, no retardation of respiration, no gasping for air, no constriction of the throat, no subjective symptoms of the skin and extremities.

A closer analysis of the symptoms follows: The rumbling in the abdomen and the eructations which appeared in most of the provers, usually at once after the dose, were constant symptoms. Another constant symptom was the pain in the head and face. The headache seemed to be difficult to distinguish, especially as it seemed associated with pain in the face and in character identical with it, having its seat in the scalp, and involving the distribution of the temporal, frontal, and supraorbital divisions of the trigeminus. The faceache was always a drawing tense sensation, at times also a feeling of pressure; the upper jaw seemed leaden and heavy; followed by single shooting-jerking pains along the course of the isolated nerves; the pain changing about, till at last it became fixed. The second kind of headache came on later, after the dulness of the head had passed

off and the pulse had decidedly fallen. This headache was associated with ringing in the ears, vertigo, etc.; and was seated within the skull, and from smaller doses was only a dull pressing sensation within the head; it was especially produced and aggravated by mental effort.

The crawling was characteristic of the extract; except in those cases when the extract came in contact with the tongue, it appeared for the first time when the pulse had fallen one-quarter of the normal, and was associated with dullness of the head, pains in the head and face. Its first indication was a peculiar biting and cooling sensation on the tongue, always associated with increased secretion of saliva, after which there came on the crawling. The symptom always observed a definite order; it always appeared first on the tip of the tongue, then over the upper surface of the tongue and on the lips, extending to the posterior portion of the mouth, then began in the tips of the fingers, then in the face, and above all in the suprahyoid region and on the chin, then in the cheeks and tips of the toes, on the perineum, chest, abdomen, and lastly, on the back. It was most violent in the forehead, least violent in the latter regions. On observing attentively the order in which this symptom appears it will be seen that it affects the different parts of the body in the same order in which Weber's measure of touch determines the sensitiveness. The crawling cannot be described; it seems like the result of pressure on the sciatic nerve, yet it is peculiar; it is not like formication, prickling, nor tickling, but rather a mixture of all these. As already stated, it is aggravated by change of temperature. I have not usually observed it on the throat. Only while eating it seems to accompany the morsel through the œsophagus to the stomach; therewith the taste is diminished.

As regards the pulse, we found that in some provers it was first increased in frequency, but after twenty minutes it sank below the normal, became small, weak, intermittent, and on retardation, as in one case from 80 to 50, it became dicrotic. This dicrotic pulse, however, was only noticed in the large arteries, mostly in the carotids, since in the radial arteries the pulse, when slow, was so small, weak, and irregular, that it could scarcely be counted. When the flat hand was placed upon the præcordial region it could be distinctly felt that the heart did not contract at once. The pulse and beat of the heart, from large doses, very frequently omitted entirely for a few seconds. In one case, from the extract of young roots, in order to feel the beat of the heart more distinctly I lay upon the abdomen, and felt plainly for some time a very violent irregular beating, which became weaker and weaker, then at last it ceased entirely for some seconds, after which it became stronger, and so on. Soon after vomiting the beat of the heart and the pulse became regular.

As regards the disturbance of respiration, we find that in the beginning there was frequent yawning, afterwards oppression, anxiety, gasping for air, with a feeling as if the chest and throat would be constricted. At this time there were a very disagreeable feeling in the throat, and nausea, so that the prover very frequently and involuntarily put his hand to the throat, where the hindrance to the breathing seemed to be. Pereira mentions this motion without being able to assign a cause for it. Previous to vomiting the respiratory movements were the most difficult and the slowest, and the anxiety of breathing the greatest (associated with the greatest retardation of the pulse); in one case the respirations fell to 8 in a minute; after vomiting the respirations became more frequent, more rapid than normal. The respiratory movements were very short, weak, and in shocks.

The temperature of the skin during the first half hour after the dose was elevated; especially the head and face were very warm, and in some cases I observed warmth in the epigastric region; after this the skin always became cool and always remained so for six or eight hours, even though well covered and heated. This coolness was not only subjective, but was very perceptible to my colleagues. The skin was pale, the features distorted, the sensibility diminished (I was able to pinch myself quite violently without experiencing pain).

As regards the subjective symptoms in the skin, they occurred at the same time as the crawling, and have been noticed as a distortion of the face, etc.; they were the most marked and the most remarkable at first. They never entirely disappeared, and were always aggravated by change of temperature.

Muscular weakness made its appearance as a laxity of the joints. The movements of the extremities seemed like those of a pendulum, with no action of the muscles, or better to describe it, as if the muscular sense failed entirely. About two hours after the dose there came on a peculiar weakness, so that after a dose of 0.1 gram of the old root, when in order to relieve the increasing need of respiration, the room seeming too tight, and associated with a sense of not enough air in it, I attempted to take a walk, I was obliged to be supported by a colleague in order to avoid falling. About six hours after the dose the weakness was so great that I was obliged to keep a horizontal position.

The sleep was always disturbed, and after the larger doses the whole night was sleepless; from small doses the sleep was frequently interrupted and very restless.

ACONITUM FEROX.

Authority. 2, C. D. Schroff, article entitled "An Extremely Dangerous Adulteration of Jalap," *Zeit. des Allg. Apothek. Ver.*, 3, p. 173, 1865.

German Aconitine (from *Acon. napellus*) always causes headache and faceache, which occur not only on the day of the proving, but during the succeeding weeks, and even for a whole year after the experiment; aggravated by every excitement in consequence of mental effort or by emotional disturbance; it also causes depression of mind, both on the day of the proving and on the succeeding days, leaden heaviness of the head, weakness, prostration, and a diminution of the frequency of the pulse lasting a long time. Dyspnoea and formication are entirely wanting. The symptoms experienced from the extract of the root of *Acon. ferox* were different, namely, the headache and faceache were entirely wanting; mental activity was greatly increased, and depression followed as a secondary effect after some time, and was so great that not the slightest mental work could be performed. In addition there were the following symptoms, especially marked; excessive dyspnoea, accompanied by a distressing feeling of anxiety; sensation of formication over the whole body; outbreak of perspiration accompanied by calor mordax; high degree of vertigo and muscular weakness; enormous increase of diuresis; extremely sharp burning taste; violent burning in the mouth and throat in spite of the fact that the extract was enveloped in a capsule; inclination to vomit, and actual vomiting; diarrhoea accompanied by pain. However small the dose of English Aconite it was able to irritate all the parts experimented upon. On frequently bringing it near the nose and taking a deep breath, in order

to get the odor of the English Aconitine (*Acon. ferox*), there occurred frequent sneezing and a disagreeable boring feeling in the nose. After a few hours there developed violent burning on the tongue, throat, and palate, associated with inclination to cough, and especially on the lips, where it was particularly violent when anything hot was drank; these latter symptoms were observed on the day when I was working with the drug, but had not voluntarily brought it near the nose or lips. Once a particle happened to get into the eye; it very soon caused profuse lachrymation, violent burning, swelling and burning of the upper lid, photophobia, so that I could read only with the greatest effort, and was soon obliged to give up the attempt to look at anything; the pupils were not remarkably affected; cold applications relieved the symptoms, which returned as soon as the applications were removed; hence I was obliged to continue their use for several hours. On the next day the upper lid was red and somewhat swollen, and also the conjunctivæ of the lids and ball were red, vision was unaffected, and on the third day the symptoms had disappeared.²

ACONITUM.

Authorities. **44**, H. C. Sherwin, *Lancet*, 1836-7 (2), p. 13, a woman swallowed a mouthful of the tincture; **45**, Richard Dix, *ibid.*, 1838-9 (1), 905, a child, æt. thirteen months, ate some of the root; **46**, *Pharm. Journ.*, vol. v, 1845, p. 140, Dr. Dale, for rheumatism, had taken the tincture in 5 drop doses, twice a day, for several days without very marked effects, then he took 10 drops, death; **47**, John Tophan, M.D., *Lancet*, 1851 (2), p. 56, a woman, æt. twenty years, took about 15 minims of the tincture; **48**, *Times* (*Pharm. Journ.*, 13, 1853-4, 294), Jos. Russell, was poisoned by the roots; (49 to 51, *Pereira's Mat. Med. and Therap.*, vol. ii, 1854, p. 1088, effects on Mr. and Mrs. Prescott, æt. fifty-seven years, and a child, æt. five years, of eating two roots); **49**, Mr. Prescott, death in four hours; **50**, Mrs. Prescott; **51**, the child; **52**, H. Simpson, *Lancet*, 1855 (1), p. 467, a girl took about 2 drachms of tincture; **53**, Dr. Mackinlay, *ibid.*, 1856 (2), p. 715, a child ate the leaves, and died in twenty-one hours; **54**, W. H. Bone, M.D., *ibid.* (1), p. 369, a man took a fatal dose of Aconite; **55**, J. Massey, M.D., *ibid.* (2), p. 100, a man ate the leaves, death; **56**, Mr. Halfield, *ibid.*, 1857 (1), p. 349, a man, æt. sixty-four years, took the root; **57**, A. F. Squier, M.D., *Pub. Mass. Hom. Med. Soc.*, vol. iv, p. 122, Wm., æt. twenty-one years, took a mixture containing Aconite; **58**, Prof. O'Connor, *Dubl. Quar. Jour. of Med. Sci.*, vol. xiii, 1857, p. 224, a woman, æt. seventy years, took a liniment containing 1 oz. tincture to 8 oz.; **59**, same, a woman, æt. forty years, took a wineglass of same; **60**, Dr. Alderson, *Lancet*, 1859 (2), p. 561, a man, æt. fifty-eight years, ate the root, death; **61**, Dr. Isaacs, *N. Y. Journ.*, vol. vii, 192 (*Pharm. Journ.*, Second Series, vol. i, 1859-60, p. 482), a druggist, was poisoned by the inhalation of the dust of the root, which he was pulverizing; (62 to 65, T. Ogier Ward, M.D., *Brit. Med. Journ.*, 1860, p. 939, a family were poisoned by eating pickles containing the root); **62**, the mother, who ate but little; **63**, the eldest daughter; **64**, the eldest son; **65**, a daughter, æt. eighteen years, suffering from anomalous dyspepsia, ate the pickles and drank the vinegar; **66**, S. Thompson, *Pub. Mass. Hom. Med. Soc.*, vol. iv, p. 638, took 4 drachms of 3d potency, run up in distilled water; **67**, J. B. Brown, *Lancet*, 1860 (2), 344, four persons ate the root; **68**, D. D. Hanson, *Bost. Med. and Surg.*

Journ., vol. lxxv, 1861, p. 155, a boy, æt. five years, swallowed a large dose of the tincture; **69**, Wm. Noble, M.D., Buffalo Med. and Surg. Journ., Dec., 1861, p. 147, a woman, æt. fifty-seven years, took between 2 and 2½ ozs. tincture, death after three hours; **70**, John M. Strachan, M.D., Edinb. Med. Journ., vol. i, 1861-2, p. 259, Mr. V., æt. fifty-seven years, took a small teaspoonful of Fleming's tincture, death in two hours; **71**, Dyce Duckworth, Brit. Med. Journ., 1861, p. 224, Dr. Nivens reports a case of a young lady who swallowed a fluid drachm of the official tincture; **72**, same, effects in two cases of applying to the conjunctiva about ¼ gr. mixed with water; **73**, John W. Kay, Lancet, 1861 (2), p. 170, a lady, took two teaspoonfuls of the tincture; **74**, L. Atthill, M.D., Dubl. Med. Journ., 1861 (2), p. 14, a man took a tablespoonful of liniment containing about 45 minims of the tincture; (**75** to **79**, from Hottat, L'Aconitine et des Effects Phys., Paris, 1863); **75**, Schöff effects of introducing a solution of ⅓ centigram into the eye; **76**, Hirtz, Union Pharm., 1861, effects of 2 to 3 centigrams of the alcoholic extract of the root; **77**, same, effects of ½ centigram; **78**, Devay, Journ. de Chim. Med., 1844, a man, æt. thirty-five years, took 40 grams of the extract in soup; **79**, same, a person ate some salad; **80**, H. W. Robinson, Brit. Journ. of Hom., vol. xxiv, p. 513, a young woman, gl. ⅓ (L. and R.) in a wineglass of water, at a single dose; **81**, same, a middle aged woman, gl. ⅓ (L. and R.) in 8 ozs. water, with a few drops of spirits of wine, a dessertspoonful every half hour for three hours; **82**, Jas. Easton, Lancet, 1866 (2), p. 34, a girl, æt. seventeen years, swallowed 3 drachms of Fleming's tincture; **83**, Dr. Johnson, *ibid.*, 1867 (1), p. 238, a man, æt. sixty-one years, swallowed about a tablespoonful of the tincture; **84**, omitted; **85**, Dr. A. Stephens, Pharm. Journ. and Trans., vol. x, 1868-9, p. 181, J. H., æt. twenty years, took an unknown quantity of the tincture; **86**, J. P. Morrison, M.D., Med. and Surg. Rep., vol. xx, 1869, p. 157, Mr. R., took a swallow of tr. Aconiti rad. (300 to 400 drops), and immediately ate a hearty dinner, recovery; **87**, omitted; **88**, B. W. Richardson, Med. Times and Gaz., 1869 (2), p. 709, Miss B., æt. twenty-five years, swallowed two tablespoonfuls of an Aconite mouth lotion; **89**, H. W. Brown, M.D., Bost. Med. and Surg. Journ., vol. lxxxiii, 1870, p. 41, Mrs. M., æt. thirty-one years, took twenty-five drops of the fluid extract; **90**, Wm. Dobie, Brit. Med. Journ., 1872 (2), p. 683, a man swallowed 1 oz. tincture; **91**, E. W. Berridge, M.D., North Am. Journ. of Hom., 1873, 501, Mr. —, took a dose em. (F.); **92**, same, Am. Hom. Obs., 1875, 307, took 200th; (**93** to **98**, from Dr. Jas. Lillie, *ibid.*, p. 434, six persons put a few globules of the decillionth on the tongue); **93**, Dr. Warren; **94**, Dr. Davis; **95**, Dr. Heacock; **96**, Dr. Anderson; **97**, Dr. Dodge; **98**, Dr. Gilley; **99**, Thomas Waddel, M.D., Cincin. Lancet and Obs., vol. xviii, 1875, p. 427, J. R., æt. thirty-four years, took ½ teaspoonful of the tincture, death; **100**, G. F. Schreiber, M.D., Philad. Med. and Surg. Rep., 1876, p. 125, a man, æt. thirty-six years, took two teaspoonfuls of tr. Aconite root; **101**, T. D. Nicholson, M.D., Month. Hom. Rev., 1876, p. 763, observations on sphymographic tracings; **102**, L. H. Jones, Brit. Med. Journ., 1877 (1), p. 258, a man took a large dose of the tincture; **103**, Dr. De Mussey, Bull. Gen. de Therap., 1877, vol. xcii, p. 326, a woman took 4 drops, and repeated the dose; **104**, C. G. Bacon, M.D., Philad. Med. and Surg. Rep., vol. xxxvi, 1877, p. 114, Mrs. D., æt. forty-three years, took a teaspoonful of the tincture; **105**, Dr. Sturgis, Lancet, 1878 (2), p. 917, Clara B., æt. twenty-one years, swallowed a wineglassful of the liniment; **106**, F. H. O'Brien, M.D., Med. Rec., vol. xv, p. 128, Miss

M., æt. twenty-four years, took $\frac{1}{2}$ drachm of tr. Aconiti rad., and repeated the dose after an hour; 107, Dr. Deschere, copied from MSS., a fraction of a drop of the tincture was taken by touching the tip of the tongue with the stopper of a bottle, at 5 P.M.

Mind.—Delirium,¹⁰³.—Some few hallucinations, such as imagining his head was three times its original size, etc.,⁸⁶.—Much lowness and depression of spirits; disposition to weep; great excitement and restlessness at night (after a few days). This experimenter could always tell when Aconite was given to her, so highly susceptible was she to its influence,⁸⁰.—[1660.] Loss of consciousness (after two hours),¹⁰⁶.—Lying on his back, in a state of insensibility, with stertorous breathing, the pulse very weak and slow,⁷⁰.

Head.—Head confused,⁴⁶.—Vertigo,^{76 77 86}.—Staggering on attempting to walk,⁷⁷.—Head thrown back,⁷⁶.—Stupid feeling in the head, in the morning; stupidity increasing, cannot think, forget what I intended to do a moment ago; do not know in what street I am walking (third day),¹⁰⁷.—Violent headache,⁸⁶.—Head felt as if compressed by a vice,⁸⁸.

Eye.—Both her eyes became very bloodshot (after a few days),⁸⁰.—[1670.] Eyes fixed,⁷⁹.—Very acute burning sensation, redness of the conjunctiva of the lids and eyeball, lachrymation. Pupils at times dilated, at other times contracted; after an hour the dilatation was constant, there was only a rim of iris. After twelve hours the dilatation still continued,⁷⁵.—Dilatation of the pupils,^{61 76}, etc.—Pupil contracted,⁵³.—Alternate contraction and dilatation of the pupil,⁸⁶.—Partial blindness, with dilatation of the pupils,⁷⁷.

Face.—Extreme pallor,⁷⁷.—Extreme pallor of face, with expression of great suffering (after two hours),¹⁰⁶.—Face flushed and distorted as if in agony (after forty minutes),⁶⁹.—Face livid,⁷⁴.—[1680.] Face pallid,⁸⁸.—Countenance hippocratic,^{61 78}.—The patient had for several days the expression of one astonished,⁷⁸.—Irritation of the cheeks,⁷⁹.—Most violent trismus in paroxysms,¹⁰³.

Mouth.—Twitching of the mouth and eyelids (after two hours),¹⁰⁶.—Burning heat of the tongue and gums,⁷⁹.—First, numbness of the tongue and difficulty of swallowing, with dryness and sense of constriction of fauces,⁶¹.—Intense burning sensation in the mouth, fauces, œsophagus, and stomach,⁸⁶.—A feeling of smarting coolness at the soft palate, soon extending to the pharynx, as if peppermint were placed there; this remained all the evening, and could not be removed by gargling or washing the mouth (after five minutes),¹⁰⁷.

Throat.—[1690.] Burning-tingling sensation in throat,⁶⁶.—Heat and constriction in the throat, immediately,⁷⁸.—Burning along the œsophagus, immediately,⁷⁸.

Stomach.—Frequent loud eructations,⁸⁸.—Nausea,⁷⁸.—Frequent retching and spitting a tenacious slimy sputa (after forty minutes),⁶⁹.—Violent retching and vomiting, with intense pain in stomach,⁵³.—Retching and vomiting; complained of constriction of œsophagus, burning sensation in the region of the stomach, spasmodic action of the muscles of the chest, abdomen, and extremities; pupils of the eyes dilated; pulse 80, small and weak,¹⁰¹.—Vomiting and purging (after three hours),⁶².—Vomiting; tremulousness; giddiness; insensibility,⁵³.—[1700.] Vomiting of an olive-yellow colored fluid,⁸⁸.—Warmth in the stomach and nausea (twenty or thirty minutes after first dose),¹⁰⁶.—Epigastric uneasiness (soon),⁸⁶.—Great pain in epigastric region,⁶⁶.—Spasmodic pains in the stomach,⁴⁶.

Abdomen.—Stitches in the region of the spleen, worse on pressure

and deep inspiration, inward pressive (fourth day),¹⁰⁷.—At 7 A.M., a gurgling in my bowels, with inclination to pass wind; on attempting to suppress it, slight tenesmus. Urging to stool, getting more and more violent very quickly; on trying to act against the pressure on my way to the water-closet, most intense tenesmus (so severe that I had to stand still and take hold of a chair to support the muscular system). All this was accompanied by constant gurgling of fluid in the bowels. Stool gushing out, with relief of tenesmus. Through the day had six more stools all of the same character, of yellow water mixed with white foam, preceded by gurgling, but without pain. One dose of Podoph. 30th stopped the diarrhœa (second day). Inclination to stool, which I could control; no stool (third day). Stool in the evening, of a natural consistency, but of a white-yellow color (fourth day),¹⁰⁷.

Urinary Organs.—Profuse diuresis: urine very pale,⁷⁶.—Urine scanty, saturated, causing slight burning in the meatus during its passage,¹⁰⁷.

Respiratory Organs.—Drink gets into larynx causing coughing,⁹².—[1710.] Loss of voice (after one hour),⁶¹.—Respiration 10 (after two hours),¹⁰⁶.—Respiration very irregular,¹⁰³.—Respiration stertorous,⁷⁸.—Difficulty of respiration (after one hour); afterwards slow,⁶¹.—Oppression of breathing (twenty or thirty minutes after first dose),¹⁰⁶.—Choking and suffocating sensation (after forty minutes),⁶⁹.—Labored, asthmatic breathing, with great groaning at each respiration (after forty minutes),⁶⁹.—Respiration almost lost,⁷⁹.

Heart and Pulse.—There was from the first great oppression in the cardiac region,⁶¹.—[1720.] Heart's action weak and irregular,⁸⁸.—**Pulse.** The effect of *Acon. tinct.* in every case is a more vertical primary rise, then a quick and slight descent and rise again, forming a double curve instead of the single downward curve, and the remainder of the line is unaltered. The pulse hence becomes softer, with a feebleness yielding to the finger, and shows a tendency to dirotism. There is a more sudden expansion of the artery, but a diminution or unevenness of arterial tension. This may be caused by the more powerful contraction of the left ventricle, or a loss of elasticity in the vessel, allowing it to yield more to the ventricular action. I infer the latter to be the true explanation, because the total length of curve or curves, showing the systolic distension, remains unaltered. But this change of arterial elasticity may be due to changes of capillary pressure, or at any rate probably indicates capillary dilatation,¹⁰¹.—Pulse rose from 92 to 104,⁹³.—Pulse rose from 80 to 88,⁹⁴.—Pulse rose from 68 to 76,⁹⁵.—Pulse rose from 70 to 100,⁹⁶.—Pulse rose from 88 to 96,⁹⁷.—Pulse rose from 72 to 85,⁹⁸.—Pulse quick and thready,⁹⁶.—Pulse 130 but feeble,⁴⁶.—[1730.] Pulse tremulous,⁷⁷.—Pulse 84, small, jerking, and somewhat irregular,⁸⁶.—Pulse feeble and intermittent,⁷⁴.—Diminution of force and frequency of pulse (after one hour); afterwards 36 and feeble,⁶¹.—Pulse 55 (after three hours),⁷⁷.—Pulse 32 (after two hours),¹⁰⁶.—Slowness of the pulse,⁷⁶.—Pulse scarcely perceptible,⁷⁹.—No pulse in the wrist or carotids, or any perceptible action of the heart (after forty minutes),⁶⁹.—Pulseless,^{84 88 103}.

Extremities.—[1740.] Trembling of the limbs, which moved incessantly,⁷⁸.

Superior Extremities.—Drawing pain and soreness in the left shoulder and arm (on which I found myself lying each time when I woke), (first night),¹⁰⁷.—Soon after dinner he complained of a peculiar tingling

sensation in his hands and arms, which rapidly increased; medical aid was instantly procured, but he rapidly sank, and died in about an hour. His brother experienced the same sensation in a slighter degree, and is now recovered.⁴⁸—Almost immediately, shooting downwards in middle of palmar surface of left wrist.⁴⁹

Inferior Extremities.—Pains and cramps in the legs,⁴⁶.

Generalities.—Violently convulsed in the face and upper extremities; her countenance pallid, with an expression of great misery. Her pulse was sluggish, but not feeble. In a few minutes vomiting came on, and she awoke as if from a profound sleep. Soon after, breathing slow, like one in profound sleep. Pulse full, but not exceeding 40 in a minute. Having roused her from her sleep with great difficulty, she vomited abundantly. She then for the first time expressed great alarm at finding herself totally blind. The pupils were not much if any dilated, but were insensible to the impression of the strongest light. She stated that she had most horrid dreams, and complained of a dreadful sensation at the pit of her stomach, which still she did not call pain. She begged to be let sleep again, but in spite of all our efforts to the contrary, her head drooped on her chest, heavy sleep came on, which in a few minutes ended in a convulsion, such as before described, and this again was succeeded by vomiting and a perfect restoration of consciousness. This state of things was constantly repeated for several hours. When in sleep her pulse fell gradually, being sometimes as low as 20 in a minute, but when roused, never beyond 40 in a minute. She expressed, when awake, a great desire for cool air, which afforded great relief. This state of things continued till 4 o'clock, when she complained of acute agonizing pain in the back of the neck and about the base of the brain, with violent permanent spasms in both arms, extending to the fingers. From this time on she speedily recovered.⁵⁰—Convulsive attacks coming on at short intervals, had vomited once, and complained of dryness of the throat, coldness and tingling of the extremities, and muscular weakness. The pulse was almost imperceptible, countenance pale and pinched, and skin shrivelled and covered with cold clammy perspiration.¹⁰⁰—Spasmodic movements resembling convulsions, were also quite common, and from three to five well-marked convulsions.⁷⁶—Very slight convulsions occurred at repeated intervals for about five hours, during which time he was supposed to be dying.⁶¹—Seized within ten hours with violent spasms and severe pains, with prickling sensation in the limbs, back, and chest, difficulty of breathing, and partial loss of sight; the pulse was considerably lowered, and the skin cold and clammy.⁶⁷—[1750.] Spasms intermitting from three to five minutes, when a most violent one took place, in which the teeth were fixed, eyes set, voice lost, and to all appearance dying. This passed off, and they became lighter, voice and sight returned; then followed for a short time hydrophobic spasms, which prevented her from taking anything.⁶⁰—Convulsive fit; the hands were clenched; the arms bent and drawn forcibly backwards; the muscles of the back became rigid and arched, so as to bear a marked resemblance to the spasm of tetanus, differing from it, however, in that there was no remission of the spasm, until the fit entirely passed off.⁷⁴—Convulsive movements of the limbs, which became strongly flexed, and which it was impossible to extend; cold clammy sweat; eyes turned upward; pulse lost; these symptoms lasted about three minutes; followed by general relaxation, loss of vision, vomiting.⁷⁴—Tremor, so that she could not stand without assistance.⁸⁸—General trembling.¹⁰³—Looking like her brother, but much worse.

After remedies she became sick, but without beneficial results; and the attacks became more frequent and severe, being attended with tympanitis, pain around waist, convulsive movements of the legs, the hands being benumbed, cold, and clenched; the pulse slow and scarcely perceptible, and she seemed about to expire. During one of the several attacks, the pulse became imperceptible at the wrist, and only audible by the ear to the chest; and then, instead of convulsions, she had complete trismus and tetanus; the hands being clenched, the arms fixed, the jaws tightly closed by the rigid masseters, and the head and trunk retracted, till she only touched the couch by her head and heels. From this time the paroxysms retained their new character, but gradually became less violent till about midnight, when she could be left with safety. The next day she suffered from severe pain in the spine, with great debility, and it was several days before she was quite well. She recollected little which occurred during the more violent attacks,⁶⁵—Semi-delirious, very flushed in the face, intense dyspnoea, bathed in icy-cold perspiration, pupils widely dilated, pulse not perceptible at wrist, and the heart-sounds could faintly be heard; vomiting.¹⁰²—In about twenty minutes he complained of a very bad feeling in his head, and was given a strong emetic of *Sulphate of zinc*. In a few minutes after copious vomiting had been produced; by this he became suddenly insensible, and I found him, about twenty minutes after, lying upon his back in a state of complete insensibility, stertorous breathing, face dusky-red, lips puffed out with each inspiration, skin cold, and profuse perspiration, especially on the face; pulse very weak, irregular, and intermittent. A moment after I came in he vomited mucus and bile, and spoke, complaining of feeling cold. He remained awake for a few minutes, during which time he appeared perfectly rational; there was great numbness of the mouth, tongue, lips, cheeks, and extremities, and a strange dull feeling in the head. He then relapsed into the comatose condition, relieved every five or six minutes by his efforts at vomiting. The depressed state of the heart and circulation, and the consequent coma and coldness of the surface, called for a strong cardiac stimulant, and I gave him one-drop doses of *Tr. digitalis* in a teaspoonful of water, every five minutes. The vomiting continued, and the pulse at the wrist was imperceptible for ten or fifteen minutes at a time; only a faint, confused movement of the heart was perceptible by auscultation. The vomiting was still frequent and violent, so that streaks of fresh-colored blood were observed in the matter ejected,⁵⁷—"About five minutes after swallowing the tincture, was seized with a pricking and tingling down the arms and fingers, and a painful numbness across the wrists; the tongue and mouth next felt the same, then the legs and feet, and in less than fifteen minutes my face seemed to be swelling and throat growing tight. On looking at my face in the glass, it seemed blue and indistinct." In twenty minutes she felt sick, and made efforts to vomit, but could bring nothing up; she was then anxious to get upstairs to bed, but her legs failing her she only reached the first floor, and threw herself upon the sofa; there she remained for half an hour, almost blind, but conscious of her plight; after that she made another effort, but when half way upstairs her lower extremities quite failed her, where she was found in the following condition: Her eyes fixed and protruded, with contracted pupils, countenance livid, jaws and fauces rigid, her arms and hands quite cold and pulseless, the legs and trunk much in the same state; her breathing was short, imperfect, and laborious, while the heart fluttered feebly under the left breast. She now and then gave a heavy sigh, and

tossed the arms backward above the head, at the same time attempting by jerks to shift her position. There was also rattling and vibration of the trachea. Upon taking an emetic she was seized with a strong convulsive fit, the eyes being drawn upwards under the lids, the fists clenched across the throat, and the teeth grating violently together, and a thick, ropy, frothy saliva was forced through the lips. At this moment her urine and feces passed unconsciously. In two or three minutes the convulsive state passed off. She says that the reason why she does not sleep is because she cannot keep the eyelids closed. This is singular and consistent with the fixed and staring condition of the eyes, and bears some relation to the contracted state of the pupils.⁴⁴—The face had a pinched, anxious expression; the forehead wrinkled and corrugated between the eyebrows; the pupils slightly dilated; the pulse 45, feeble and intermitting; extremities cold; consciousness quite unaffected. She said she felt a burning sensation in the fauces, and a constriction at the chest; and that she had no feeling in her arms, legs, and face. The feeling of having no feeling (to use a paradox), she said, was "dreadful, worse than any pain,"⁷³.—[1760.] Alarming prostration; the breathing became labored; the pulse at the wrist irregular, intermittent, and finally imperceptible; a quantity of frothy mucus was discharged from the mouth and nostrils; the skin became dusky; a cold clammy sweat bedewed the face and forehead.⁹⁹.—Vomiting, slow and intermittent pulse, dilated pupils, with great tendency to stupor, and apparently suffering much pain,⁴⁵.—Pulse subdued, difficulty in swallowing, speech affected, and memory partially gone.⁸⁵.—Slight congestion of the membrane occurred, and photophobia in both cases; also slight contraction of the pupil. The tingling sensations continued for six hours; and at the end of that time the eyeball, in one case, protruded an eighth of an inch from the socket; in the other the tingling was referred to the angle of the jaw and down the side of the neck. They both lost an entire night's rest.⁷².—His mouth filled with water soon, afterwards he had a depressed, heavy look, his face being rather livid, and he staggered about as if he were drunk, complaining that his legs felt swelled, and too heavy for him to lift them. The numbness about the jaws continued, with occasional attacks of extreme depression and faintness, during which the face became livid, and the pulse very feeble. After remedies he became sick, when he began to rally. The next day he had severe pain in the spine, with great debility, and it was several days before he was well,⁶⁴.—Soon complained of great pain; vomiting and purging set in; he lost consciousness for a few seconds, but at other times was sensible. He was in a state of collapse on admission; very pale; skin cold and covered with perspiration; pulse slow, intermittent, and scarcely perceptible; bowels relaxed,⁶⁰.—Pallid countenance, dilated pupil, cold extremities, extremely feeble and slow pulse, alternate relaxation and spasm of the muscular system, respiration very much retarded, subsultus tendinum, or rather wild movements of the arms and hands, and complaining at intervals (a word or two at a time) of intense thirst, severe burning pain in the stomach, vertigo, headache, dryness of the throat, etc.; said she could not swallow or speak, that the room was quite dark; "I am so numb, I can't breathe," etc.,⁸⁹.—In fifteen minutes complained of numbness of lips, tongue, and throat; considerably excited, but very rational; said his feet were prickling and numb, as well as his throat, which had lost all feeling; pulse about 80, considerably weaker than normal; profuse sweating; disturbed respiration; complains of nausea. After vomiting his pulse became very weak, and he complained

of numbness over his entire body; became delirious, and said he was dying; was very restless, jerking, and jumping about; was with difficulty kept upon the bed,⁹⁹.—Immediately on swallowing, felt a burning sensation in mouth and throat, and shortly afterward in his stomach, which was soon accompanied by a numbness and tingling of the lips and tongue. Half an hour after taking the fluid he vomited freely, and half an hour later began to complain of numbness and sense of weight in his extremities, which became very cold, and he was unable to raise them from the ground. His breathing shortly became hurried and labored, and he complained of pains running from his head through all his limbs. Face flushed and conjunctiva injected; hands and feet cold and clammy; restless, frequently “drumming” the table with his feet, saying they seemed like two heavy weights attached to his body.⁸³.—Directly after swallowing it she noticed a nasty taste in her mouth, and immediately felt a tingling sensation in her mouth, lips, and tongue; her teeth felt as if they were loose, and her lower jaw felt dead; the eyes were dim, and she shivered. Twitching of the muscles of the neck, and spasms of those of the limbs, collapse,¹⁰⁵.—[1770.] Burning and numbness of the lips, mouth, and throat, and violent vomiting. She experienced a curious sensation of numbness in the hands, arms, and legs, and she lost the power of articulating. Her attempts to speak were attended with unintelligible sounds only. She experienced great muscular debility, and was unable to stand. She felt stiffness of and difficulty in moving her limbs. Some of her external senses were disordered; thus, to use her own expression, though her eyes were wide open, her sight was very dim, and surrounding objects were seen indistinctly. The sensibility of the body was greatly impaired; her face and throat were almost insensible to touch. She felt very giddy, but was neither delirious nor sleepy. For the most part she was conscious, but at times scarcely knew what was passing around her. Her body and extremities were cold. She was frequently pulling her throat about, but she knew not why,⁵⁰.—She was similarly but more slightly affected, except that she evinced a slight tendency to sleep. Like the others, she was constantly putting her hands to her throat,⁵¹.—In about three-quarters of an hour he complained of burning and numbness of the lips, mouth, and throat, which soon extended to the stomach, and was accompanied with vomiting. The matters ejected were first his dinner, and afterwards a frothy mucus. Extremities cold, but chest warm; the head was bathed in cold sweat. His eyes, to use the expression of his neighbor, were “glaring.” He complained of violent pain in the head, and trembled excessively. The lips were blue. He frequently put his hand to his throat,⁴⁹.—Immediately felt a sensation of numbness in the tongue, accompanied by difficulty of swallowing; soon afterwards she began to cry violently, this act being accompanied by convulsive twitching of the facial muscles. Immediately after this she lost the power of walking, and began to eject a quantity of mucus from the stomach. Three hours after taking the dose she was lying upon a sofa, resting upon her back, with her eyelids closed and the pupils slightly contracted. She was quite unconscious when spoken to, and during an hour’s observation she only spoke intelligibly twice, and then said, “What is it?” Every now and then she uttered a peculiar plaintive cry. She was continually moving her tongue round the interior of her mouth, from time to time thrusting the organ out beyond the lips, and moving it from side to side. The pulse was weak but regular. The bystanders said it had been intermittent. The hands and feet were cold. There was constant lachrymation, inso-

much that a woman was constantly wiping the sufferer's eyes with a handkerchief. The intensity of symptoms varied; sometimes she would lie quite still for several minutes, and then all at once be seized with a paroxysm of sighing, every now and then exclaiming, "What is it?" During the night she had very little sleep, her rest being disturbed by dreams that she was falling from a height. The next day she complained of pain in the lower part of the back, and numbness in both arms,⁴⁷.—Severe pains shooting through head, peculiar tingling sensation in whole body, arms and limbs benumbed, a choking sensation, lightness in the head, with partial loss of sight (in half an hour). Restless and delirious, features pinched, a dark ring around eyes, pupils slightly contracted, skin covered with cold clammy perspiration, breathing hurried and short, pulse 45, and scarcely perceptible at the wrist, at intervals peculiar choking paroxysms (after two hours). Sleep restless, disturbed by dreams (first night). Slight headache, burning pain in stomach and bowels, which were tender on pressure (second day),⁴⁸.—The first intimation that anything was wrong was given about an hour and a half before I saw him, when he complained of his throat, walked unsteadily, and articulated with difficulty. I found him comatose, the eyes half closed, expressionless, the pupils insensible to light, though not much dilated. The pulse was feeble and irregular, respiration requiring artificial aid to support it, and the muscles and ligaments so much relaxed that he could neither stand nor sit up unless supported. His respiration finally degenerated to a gasp, occurring five or six times to the minute, then he would convulsively straighten out in the lap of his attendant, throw his head and shoulders back, and his hands over his head, as if, mechanically, to get a longer and fuller respiration, then relax into the same state as before,⁴⁹.—First felt numbness at the tip of the tongue, extending to the base, with a sensation that it was swelled; rigors, with great depression, and a feeling of extreme illness; she got out of bed, and soon was so paralyzed that she could not get into bed without assistance; she lay quiet for some time, but thinking she was dying, she begged to be taken to the window, which was soon done; and now she found that, with a feeling that her eyes would drop from their sockets, she lost her sight, and her jaw dropped, so that she was obliged to have it tied up. She was again carried to bed, and remained in much the same state at intervals during the night and following day. The third day she had a severe attack of pain in the stomach,⁵⁰.—Breathing extremely slow and slightly stertorous; pulse very feeble, and scarcely counting 40 in the minute; extreme pallor of the countenance; she was speechless from debility, the expression of the countenance showing the intellect was still clear. The muscles of the face were feebly convulsed, as also the right leg and hand, at short intervals, about every second or third minute. She labored a part of the time under a delusion that her head was many times its ordinary size, which she thought we ought to perceive,⁵¹.—Found stretched on the bed, with his face downwards, groaning and complaining of agonizing, burning pain at the epigastrium; parched mouth, intense thirst, constant retching; the pulse was imperceptible, the skin cold, though perspiring, and the countenance expressive of extreme agony; jactitations incessant, scarcely remaining half a minute in the same position,⁵².—Giddiness; intense burning feeling along the tongue, extending to the fauces; coldness of the hands and feet, and along the spine; twitches of the muscles of the face, and of the fingers and toes; dimness of vision; dilatation of the pupils; inability to swallow; weak pulse; involuntary escape of feces. A little before

death there was one universal convulsion. Towards the fatal termination his skin was cold, his lips blue, his pulse almost imperceptible, and his respiration oppressed and labored,⁵⁴.—[1780.] From about twenty minutes after taking the medicine, continual retching or unsuccessful efforts at vomiting; great prostration; pulse imperceptible at the wrist, the action of the heart scarcely audible, the skin cold and clammy, the eyes staring; pupils dilated, the right one being really oval, and the left irregularly polygonal; conscious until death, which took place in the following manner: Having resisted for awhile the attempts to give her medicine, she suddenly sat up in bed and said, "I will take more if you won't force me." Having then tried to swallow a little, she sank back again; the heart's action was no longer perceptible by the stethoscope, and after this she gave but one inspiratory heave, her death occurring somewhat more than five hours from the time of taking the poison,⁵².—At the end of five minutes felt a tingling in the fingers, with a feeling as though the temperature of the body were lowering. This continued to a sense of coldness, with dry, parchment-like skin. Then a chilliness, with occasional nervous uneasiness and anxiety, which continued an hour and three minutes. Then alternate chills and flashes of heat, almost constantly breaking into each other, lasting thirty-five minutes (the tingling and nervousness continues). Then a dry heat set in, with a peculiar tenderness of the flesh to the touch, and nervous anxiety. Thirteen minutes after the inception of this stage, a slight headache set in, with seething in the ears. At the end of fifty-seven minutes this last stage closed, with slight vomiting and sweat. Tingling, nervous anxiety, and dry skin existed throughout, after the first five minutes,⁵⁶.—In an hour the pupils were so dilated that the iris could not be seen, and this condition lasted till the following day. It was a fortnight before she had entirely lost the tingling and numbness, and feeling of malaise, and for weeks after she was subject to sudden fits of numbness in the feet, so severe as to cause her to fall; even six months afterwards she was liable to vomitings and sensations of cramp in the throat, to which she was not subject before she took the poison,⁷¹.—Extreme restlessness,⁶⁶ ⁷⁴.—Loss of muscular action,⁶⁶.—Prostration (after one hour),⁶¹.—General nervous prostration, with great tendency to sleep,⁶⁶.—He gradually became weaker, and on the following evening was found in a dying state, from which he did not rally, but expired about ten o'clock in the morning,⁴⁶.—Extreme languor,⁷⁴.—Faintings,⁶⁸.—[1790.] Numbness over entire body,⁶⁹.—Numbness, sensibility impaired,⁶⁶.—Great numbness and feeling of cold,⁶⁶.—Numbness all over the surface of the body, more especially on the hands, face, and calves of the legs,⁷⁴.—Benumbed tingling in the legs, arms, head, face, and mouth,⁶⁸.—Numbness, tingling, and slight muscular weakness (after first dose). She started soon after the second dose to walk a distance of two miles, and did not complain until about half way; on reaching her destination she began to stagger, and was soon completely prostrated; her voice became very weak, and she complained of cephalalgia and lancinating pain in different portions of the body, but particularly in the joints,¹⁰⁶.—Tingling and prickling,⁶⁶.—A great sense of oppression and weight,⁷⁴.—Her pains she described as "**Agony**!" "Oh, such agony!" but said her pain was not acute,⁶⁹.

Skin.—Patchy spots and discolorations on limbs,⁵³.—[1800.] Spasmodic contractions of the skin, which the patient endeavored to relieve by constantly rubbing the parts with his fingers; this singular sensation in the skin, especially in the face, may be likened to the effects of electric sparks, and was especially marked in the wings of the nose, which the patient con-

stantly pinched.⁷⁷—Insensibility of the skin (mind unaffected),⁷⁸.—Constant peculiar prickling in the skin of the face,⁷⁶.—Acute itching over the whole body, especially on the face about the nose,⁷⁷.

Sleep.—Very drowsy and sleepy all day (third day),¹⁰⁷.—Shortly after she felt quite drowsy; she feels herself sleeping, while still awake; extremely prostrated, and as if beaten all over. This experimenter was very sensitive to the action of this medicine, and recognized at once that Aconite had been given to her,⁸¹.—Restless night, tossing about in bed (first night),¹⁰⁷.

Fever.—Chilliness,¹⁰³.—Chilly feeling, with white cold hands, towards evening (second day),¹⁰⁷.—Temperature very low, with icy coldness of the skin,⁷⁸.—[1810.] Skin icy cold,¹⁰³.—Extremities cold,^{46 66}, etc.—Axillary temperature was 97½° (after two hours),¹⁰⁶.—A feeling of dry heat and tightness of the skin over the whole body, accompanied by a sensation of numbness and tingling. This commenced in his feet, and spread quickly upwards,⁷⁴.—Cold sweat,⁷⁹.

ADOXA.

Adoxa moschatellina, L.

Natural order, Caprifoliaceæ.

Common name, Moschatel.

Authority. Dr. Hannon, Rev. de Therap., 1865, flowers of "tilleul," effects on healthy men.

Vertigo.—Headache.—Weariness of the lids.—Dryness of the pharynx and œsophagus.—Qualmishness in the epigastrium.—General prostration.—Nervous tremors in some persons.—Sleepiness.

REVISION OF *ÆTHUSA*.

The experiments detailed below throw so much doubt upon the various cases of poisoning attributed to *Æthusa* that we have concluded to throw them out entirely.

Indeed, it seems established beyond any possibility of doubt, that the plant is harmless.

Our own experiments prove this conclusively; in New York we had the co-operation of thirty or forty individuals, who took varying doses of the expressed juice of the plant without the slightest effect. The editor himself drank it by the wineglassful. A few experienced some disturbance: these are given in detail. It was not attempted to make a proving, as in that case the potencies would have been tried; we only desired to verify Dr. Harley's observations as to the poisonous nature of the herb. Our preparation was obtained, through Messrs. Boericke & Tafel, from Leipzig, and was accompanied by a certificate of genuineness from the Director of the Botanic Gardens. The expressed juice was preserved by a small per cent. of alcohol.

I. Experiments by Dr. Harley, St. Thomas's Hospital Reports, 1873.

II. Experiments by Dr. T. F. Allen, New York Homœopathic Medical College, 1876.

III. Experiment by Dr. Brugman, A. H. Z., 72, p. 56.

IV. Experiment by Dr. Tournon, A. H. Z.

V. Case by Dr. Roques, A. H. Z.

REVISION AND RÉSUMÉ.

Authorities. 1, Nenning, from Hartlaub and Trinks's *Annalen*, vol. iv.; 2, Hartlaub, *ibid.*; 3, Trinks, *ibid.*; 4, Petroz, *Ann. d. l. Soc. Med. Hom.*, 4, 337; 5, Brugmans, *A. H. Z.*, 72, p. 56, took a few grains; 6, Tournon, *ibid.*, ate some in salad; 7, Roques, *ibid.*, effects in a woman; 8, Bigler, *Am. J. Hom. M. M.*, 5, 459, effects of 3d dec. (in a patient); 9, Harley, *St. Thos. Hosp. Reports* (no symptoms); 10 to 15, from Dr. Allen's provings, see above.†

I. By John Harley, M.D., *St. Thomas's Hospital Reports, New Series, Vol. II*, 1873, p. 80.

The observations have been made with the juice of the entire plant; with tinctures prepared from ripe and green fruit; with a fluid extract prepared with the view of separating any cynapine or other active principle that may have been left in the plant after the expression of the juice, and with the oleo-resin.

Observation 1.—J. W., a weakly young man, troubled with frequent seminal emissions, took 3½ fluid drachms of the Æthusa juice, and, having sat still for the first hour, strolled out during the second. At the end of an hour the oscillating pupils contracted a very little more than they were observed to do before the dose, but beyond this there was no effect whatever. 4 fluid drachms of *Succus conii* produced a moderate effect upon this patient.

Observation 2.—John T. B., aged twenty-two, the subject of sexual debility from excessive self-abuse, but otherwise strong and healthy, and in whom 6 drachms of *Succus conii* produced moderate concision, took the Æthusa juice for a time, in doses increased from 90 minims to 4 drachms, an hour before breakfast every other day. No effects whatever followed.

Observation 3.—Clara L., an active but slightly developed child, aged seven, the subject of interstitial keratitis, and in whom 6 drachms of *Succus conii* produced only moderate effects, took two doses, one of 3 drachms and the other of 4 drachms, of the Æthusa juice, about two hours after breakfast, on separate days. Beyond a slight temporary rise of pulse, due to the alcohol, there was no effect. The patient subsequently took tincture of the fruit. (See Observation 10.)

Observation 4.—W. W., aged nineteen, an active healthy lad, troubled with frequent seminal emissions. 6 drachms of *Succus conii*, 30 minims of *Succus belladonna*, and 1 grain of Opium, always produced their appropriate effects in a moderate degree upon this patient. Beginning with 1½ drachms, and rapidly increasing the dose to 1 ounce, he took the latter quantity of Æthusa juice every second or third day for about a month. Effects were carefully looked for, but none were appreciable, either to the patient or to myself.

† Didier, No. 4, in résumé in vol. i of this work, is not original, but a résumé of other provings, hence it is omitted; symptoms from the supposed cases of poisoning cited by Roth are discarded; Cattell's symptoms, *Br. J. of Hom.*, 11, also discarded; Thompson's case of poisoning, *Lancet*, 1836-7, p. 850, doubtful; all other supposed poisonous effects and cases of poisoning are omitted; it having been clearly substantiated that the plant is harmless to produce grave effects.

Observation 5.—Henry H., aged seventeen, a strong active youth, troubled with frequent seminal emissions, took Conium for some time, and a fluid ounce of the Succus always produced moderate coneism. On one occasion I gave him 7 drachms of the Æthusa juice, and kept him sitting under my observation for two and a quarter hours. Just previously he had walked to my house, and the pulse was 86, the pupils slightly oscillant and contracting to $\frac{1}{6}$ ", and the tongue whitish and moist, with an acid secretion. After forty-five minutes the pulse was 82, full and regular, as at first. The pupils and tongue were unchanged. After an hour and a half the pulse was 80, and otherwise unchanged. The pupils were now oscillating between $\frac{1}{6}$ " and $\frac{1}{7}$ ". After two and a quarter hours the pulse was 74, regular, and of natural volume and force; the pupils were $\frac{1}{6}$ ", dilating a little, as before the draught; the tongue was unchanged, and the secretion acid still.

Two days afterwards 9 drachms of the Æthusa juice were taken, the pulse being 86 and the pupils $\frac{1}{6}$ ". After forty-five minutes the pulse was 88, full and soft; the pupils fairly steady, and contracting to $\frac{1}{7}$ ". After one hour the pulse was 80, otherwise unchanged; the pupils still $\frac{1}{7}$ ". After two and a quarter hours pulse 72, regular, of initial volume and power; the pupils $\frac{1}{6}$ ". The tongue remained unchanged throughout.

After an interval of eight days I gave him 11 drachms of the Æthusa juice, two hours after a hearty meal, and watched for effects under the same conditions as before, the pulse being 84 and the pupils $\frac{1}{6}$ ". After an hour and a quarter the pupils were unchanged and the pulse had risen to 82, but was not appreciably altered in volume or force. After two hours it was 80, and of initial volume and power, and the pupils were still $\frac{1}{6}$ ". At the end of this time the patient passed 15iiiiss. of urine (having emptied the bladder just before taking the dose), of sp. gr. 1032; excepting that it contained an excess of uric acid it was normal. Neither on this nor on any previous occasion did the patient himself experience any effect.

Observation 6.—George W., aged seventeen, a well developed and moderately strong young man, the subject of epileptic aura. Upon this patient 30 minims of Belladonna juice, $\frac{1}{30}$ of a grain of Atropia, 4 drachms of tincture of Henbane, 6 drachms of Succus conii, and a mixture of 4 drachms each of tincture of Henbane and Succus conii, severally produced their proper effects in a moderate degree. Failing to get benefit from either of these remedies or the bromides, I gave him the Æthusa juice, beginning with 1-drachm doses every morning before breakfast for eight days, then 3 drachms increased to 4 drachms, for six days more.

A fortnight afterwards, in the evening, I gave him a single dose of 7 drachms, and he remained quiet for the next two hours. The pulse before the draught and after a walk to my house was 84, the pupils $\frac{1}{7}$ ", the tongue clean, and wet with alkaline mucus. After forty-five minutes the pulse was 85, unchanged. After two hours the pulse was 70, and of natural volume and force; the pupils and tongue remained unchanged throughout.

After an interval of six weeks the juice was again given in doses of 1 ounce, increased to 1½ ounce every other morning, an hour before breakfast, for a month. During the next nine days he took three doses, each consisting of 2 ounces of the thick juice. Effects were carefully watched for as often as the dose was increased, but both the patient and myself failed to observe any.

During the eight months which partly preceded and included the time of this treatment, the daily fits averaged $4\frac{1}{6}$, never exceeding five, nor falling below two. On the days when he took the largest doses (2

ounces) of Æthusa juice he had the full number (5) of fits, and on the intermediate days four. This was probably due to the alcohol.

Observation 7.—E. B., aged twenty-one, a strong healthy young man, in whom 6 drachms of Succus conii produced slight coneism, took the Æthusa juice for a fortnight, in doses increased from 1 ounce to 2 ounces, every other morning before breakfast. The patient failed to experience any effect, nor could I detect any, except after one dose (an ounce and a half) a doubtful contraction of the pupil.

The following observations were made after a dose of $2\frac{1}{2}$ ounces taken with as much water, the pulse being 78, pupils $\frac{1}{8}$ ", and the tongue clean and moist. After taking the dose the patient strolled out for forty-five minutes, and then sat quietly during the rest of the time. At the end of an hour the pulse was 78, regular, and of initial force and power, the pupils were slightly contracted (?), the tongue unchanged. After two and a quarter hours the pulse was 68, otherwise unchanged; the pupils slightly contracted, measuring nearly $\frac{1}{7}$ ", the mouth unchanged.

Observation 8.—George L., aged nineteen, the subject of chronic spasm of the right arm, but otherwise healthy, and in whom 6 drachms of Succus conii produced moderate effects, took 2 fluid ounces of the Æthusa juice, and three days afterwards 4 fluid ounces for a dose. On both occasions effects were carefully watched for during the three hours following each dose. Excepting slight somnolency, due to complete rest of mind and body during this interval, and to some extent probably to the alcohol, no effects were appreciable, either to the patient or myself. This patient took other preparations of Æthusa. (See Observations 12, 14, and 15.)

Observation 9.—I took tincture of the nearly ripe fruit, in doses varying from $\frac{1}{2}$ fluid drachm to 6 fluid drachms, without experiencing any effect.

Observation 10.—The subject of Observation 3, a little girl, seven years old, took this tincture diluted with a little water, in doses increased from $\frac{1}{2}$ fluid drachm to $\frac{1}{2}$ fluid ounce. Excepting a slight rise of pulse at the end of an hour, due to the alcohol, no effects followed any dose.

On one occasion, just after she had walked a distance of two miles, and two hours after breakfast, the pulse being 120, and the pupils $\frac{1}{8}$ ", I gave her 6 fluid drachms, and kept her sitting during the next two hours. After one hour the pulse was 98 and normal, and after two hours 96. The tongue and pupils were unchanged throughout, nor were any effects felt by the patient.

Observation 11.—I have taken the tincture prepared from ripe fruit, in doses ranging from $\frac{1}{2}$ fluid drachm to 1 fluid ounce, without experiencing the slightest effects.

Observation 12.—George L. (see Observation 8) took on one occasion 6 fluid drachms of the tincture, and on another 1 fluid ounce. No effects followed either dose.

Observation 13.—I took 1 fluid ounce of the tincture prepared from the green unripe fruit, and experienced no effects.

Observation 14.—George L. (see Observations 8 and 12) took 2 fluid ounces of this tincture, and sat still for the three hours following. Excepting the slight stimulant effect of the alcohol, there were absolutely no results.

Observation 15.—George L. (see Observations 8, 12, and 14) took the fluid extract in doses of $\frac{1}{2}$ drachm, 1 drachm, and 2 drachms; not the slightest effect followed either dose.

My observations at present extend no further. I may mention that no

trace of gastric irritation or any other effect, immediate or subsequent, occurred in any case. The results, therefore, are merely negative. The slight contraction of the pupil observed in some cases was probably due to the stimulant effect of the alcohol in steadying an oscillating pupil.

The largest dose of the juice given was 4 ounces of the spirituous mixture, which is equivalent to 3 ounces of the fresh juice and to 6 ounces of the fresh herb.

The maximum doses of the tincture of the *ripe* and *nearly ripe* fruit was 1 fluid ounce, equivalent, in either case, to 90 grains of the fruit.

The largest dose of the tincture of the *unripe* fruit was 2 fluid ounces, equivalent to more than 300 grains of the fruit.

Observation 16.—10 grains of the oleo-resin, obtained partly from the herb and partly from the fruit, were taken in solution by a healthy adult. No effects whatever followed.

II. *Experiments made under the Direction of T. F. Allen, New York Homœopathic Medical College, 1876.*

Proving of Æthusa by Thomas Wildes.—January 14th, 1876, 1 A.M. Took of θ 1 drop in a tablespoonful of water on retiring to bed. General peripheral sensation of warmth within five minutes.

6.30 A.M. Wakened with strong sexual desire, and a feeling of glow over the entire body. I took 1 drop on the tongue, with an *instantaneous* sensation of nausea, confined to the mouth and pharynx. Reacted more freely than usual from my shower-bath.

7.30 A.M. 1 drop and same sensation of nausea.

9 A.M. 1 drop and same sensation of nausea.

10 A.M. 1 drop and same sensation of nausea.

11 A.M. 1 drop, sensation of nausea extended down the œsophagus and into the stomach, with rumbling and gurgling in the stomach and upper bowels, and a sensation of fluttering motion in the stomach. Metallic slimy taste in the mouth with dryness. Nausea, and general feeling in the stomach as if I had been on a spree last night. Forehead feels constricted, and yet a sensation of pressure as from within outward.

Took 1 drop with less immediate nausea.

12 M. Took 1 drop.

1 P.M. Took 1 drop.

2 P.M. Took 1 drop.

3 P.M. Took 1 drop; heat and pressure in forehead.

4 P.M. Took 1 drop.

5 P.M. Took 1 drop; sensation of stuffiness in perfectly sound right ear, with feeling of coldness in it, around and behind the same, seeming to be in the bone,

6 P.M. Took 1 drop; no sensation.

7 P.M. Took 1 drop; aching in left mastoid process.

Have noticed all day that excretions (urine and perspiration) are increased, and secretions decreased. I also felt all in a glow, and perspired easily when walking home in the cold to-night.

8 P.M. Took 1 drop.

9 P.M. Took 1 drop; a feeling in stomach and bowels as if diarrhœa was coming on.

10 P.M. Took 1 drop.

11 P.M. Took 1 drop; skin of hands dry and shrunken, as if they had been washed in lye, especially on the palmar surface.

12 P.M. Took 1 drop and retired; no symptoms to note.

January 15th, 6.30 A.M. Awoke with an intense frontal headache, with sensation of constriction from points vertically over each eye; relieved by pressure. Quantity of urine diminished. I took 2 drops; no sensation.

8 A.M. Took 2 drops; headache better.

9 A.M. Took 2 drops; headache gone.

10 A.M. Took 2 drops.

11 A.M. Took 2 drops; sensation of tension as of a band passing around the forehead and made fast at each zygoma.

12 M. Took 2 drops; sensation as if I had caught cold and a violent coryza was coming on.

1 P.M. Took 2 drops; sensation of heat and fulness in the face, and pressure in the frontal sinuses and upper nasal passages. Nausea. General headache: Excessive flow of pale urine.

2 P.M. Took 2 drops; face feels better.

3 P.M. Took 2 drops; face feels well, but is beginning to look peaked and hollow-cheeked. Slight headache. Feet and limbs cold nearly to the knees.

4 P.M. Took 2 drops; coldness of limbs more marked.

5 P.M. Took 2 drops.

6 P.M. Took 2 drops; slight nausea.

7 P.M. Took 2 drops; slight nausea.

8 P.M. Took 2 drops.

9 P.M. Took 2 drops.

10 P.M. Took 2 drops.

11 P.M. Took 2 drops; sharp cramps in the small intestines, localized in spots, and quickly shifting from place to place.

12 P.M. Took 20 drops and retired.

January 16th, 7 A.M. Wakened with a sort of seething feeling in my blood, and a heavy aching pain in my back across my kidneys; also a pain between my shoulderblades. Feeling as of an indigestible load in my stomach. Quantity of urine normal. Took 20 drops.

8 A.M. Before eating breakfast I drank half a goblet of milk (contrary to custom, as I never drink milk); no effect. Waited five minutes and took 20 drops without effect, except a feeling as of a load in the stomach and an indisposition to eat, although *appetite* was average fair. Food all tasted alike, in fact, was nearly tasteless. I also noticed this symptom yesterday but failed to record it. A desire to swallow, as though to keep something down, but without nausea. Waited ten minutes after taking the milk and the 20 drops, before eating breakfast.

11 A.M. Have noticed since breakfast a marked sensation as of a load in the stomach and upper bowels, as though the process of digestion was not going on properly for want of sufficient gastric juice. Mouth and lips dry. Urine decreased. Skin had a dry, white, leathery, pinched look; cheeks are sunken; clothes seem loose. Sexual desire diminished.

I can conceive that this drug *might* produce vomiting from a *weak stomach*, if the proving was pressed, by reason of its retardation of the secretion of the gastric juice, and thus causing the food to act as a foreign body in the stomach. But it will *not* make me vomit.

January 16th, 2 P.M. Gave 5 drops to Mrs. P. just before she commenced eating dinner. She at once complained of a heated, flushed feeling, as if

she had taken a glass of liquor, with a sensation of nausea. After waiting five minutes, she had drank some milk at once, she had to go into the open air to keep from vomiting. At the expiration of another five minutes I gave her 5 drops more, followed by 2 fluid ounces of milk, and this was followed in two minutes by 5 drops more. She at once sought the kitchen, retched violently, and threw up a lot of phlegm, but phlegm only. At the expiration of ten minutes I gave her 5 drops more (20 drops in all), which again made her deathly sick, but she could vomit only phlegm. Throughout this time she felt a constant nausea, and had a sensation in the upper bowels as if she had taken a dose of medicine which was working. The eyes got watery and the face flushed and hot.

I certify that the foregoing is correct in every particular.

MRS. SARAH PACK.

The above statement was written down immediately after dinner, from Mrs. P.'s statement and doings made at the time in the presence of a table full, and was signed by her after she had heard it carefully read aloud.

THOMAS WILDES.

January 16th, 6 P.M. I gave 5 drops to Mr. H. before he commenced eating his supper. He at once complained of a feeling of heat all through the body, and a perspiration broke out on his forehead. He then drank 2 fluid ounces of milk, and three minutes afterwards I gave him 5 drops more (10 drops in all, in five minutes), when he complained of nausea, metallic taste in mouth, and headache in the forehead, shooting up over the eyes. He did not vomit, and in a few minutes ate his supper.

Mr. H. reports this morning, January 17th, that he still feels a slight sensation of nausea, with warmth and an uneasy sensation in the œsophagus and stomach, and a metallic taste in the mouth. He had an increased flow of urine this morning, of a sweet odor. Up to 12 o'clock, last night, he had a heavy undefined sensation in his head like a general headache, with intermittent pains in the forehead, located vertically over each eye, in lines. The metallic taste was very marked up to that hour, and also the sensation of nausea, which extended from the fauces to the stomach, combined with great warmth covering that entire region, spreading out laterally, and extending down into the upper bowels, together with pains in the stomach and upper bowels, as though caused by something hard and indigestible. He describes the pains which he had over his eyes as shooting pains, starting above the eyes and going upward and slightly outward ; thus



I certify that the foregoing is a correct statement of symptoms experienced by me this morning, and from 8 to 12 o'clock last evening, after taking ten (10) drops of a medicine from Dr. Wildes at 6.30 P.M., in addition to symptoms I felt immediately, and which he has recorded.

J. L. HURD.

Mr. Hurd is a young gentleman in excellent health, knows nothing of homœopathy or the proving of medicines, and when he took the doses was not aware that the medicine was expected to do anything except make him sick at his stomach.

These points he noticed himself, and this morning described them to me in very nearly the language which I have given above.

As a verification of his symptoms I would add that I felt nauseated all day yesterday, January 16th, at the sight of food, although I was no longer taking the drug; and I had the continued sensation of a hard ball or load in the stomach, which latter I have at this moment; yet I could eat.

When I retired to bed, at 1 A.M. (this morning), I quickly had numerous fine sharp stabbing pains, lasting five minutes, and some of which were so sudden and violent that I was forced to exclaim with pain. •

I have recorded throughout only such symptoms as were sudden, unexpected, and evidently came from the drug.

Proving of Æthusa by E. H. Linnell.—I received an ounce of Æthusa, which I have taken, but without any very marked or satisfactory results. I commenced with it last Friday, and during the day I took about 1 drachm, in frequent small doses. The only unusual feeling was a slight uneasiness in the stomach, as if a precursor of an attack of gastric catarrh. During the day I drank quite a good deal of milk with my meals. I took no more of the drug till Saturday afternoon, when I took it every fifteen minutes for nearly four hours. I commenced with 10 drops, and increased the dose 10 drops each time, so that the last time I took 120 drops, and 670 in all. I felt a decided weight and heaviness in the stomach, which lasted about two hours, but there was no nausea, although after taking the last of it, I made a meal mostly of bread and milk. I have a very strong stomach, and very seldom suffer from indigestion so that I feel confident that the sensations I have mentioned, though meagre, were caused by the drug. Perhaps I should state that I took the medicine each time on Saturday, in more or less water, according to the dose, and it is possible that the water caused the sensation of weight, rather than the drug, although I hardly think that was the case.

Proving of Æthusa by Ernest P. Macomber.—I put 24 drops of this drug into twenty-four teaspoonfuls of water, taking one teaspoonful every five minutes, till all was taken, with the following results. On counting my pulse, after taking the third dose, it had decreased from 76 beats per minute to 72. After taking the sixth dose, pulse 69, and I also noticed a slight constricted sensation about head. After ninth dose pulse 66. After twelfth dose pulse 62. After eighteenth dose pulse 60 and soft in character. After twenty-fourth dose pulse soft in character, beats 57 per minute, also slight nausea, and a loose discharge from bowels, of a yellow color and sour smell.

Proving of Æthusa by Dr. St. Clair Smith.—Took at 3.30 180 drops. Immediately, burning in mouth, throat, and œsophagus, with profuse salivation and secretion of mucus in both mouth and throat; this copious flow of mucus continued for some fifteen or twenty minutes, with qualmishness, and was followed by a feeling of dryness of tongue and throat. Burning in stomach from the beginning, but gradually increasing, accompanied by eructations of a rancid taste, causing burning in œsophagus and throat; heartburn, lasting some time after the eructation, with an inclination to spit and clear the throat. Some nausea, with waterbrash, of sour hot fluid; at one time vomiting seemed inevitable. Later, an uncomfortable qualmish feeling in stomach, hardly amounting to nausea, also of pain in forehead, a sort of crampy feeling, with disposition to contract the brows.

Deepseated sensation of coldness in the upper part of abdomen, in region of transverse colon.* Later, aching in malar bones, principally the left (crampy). Pain in forehead increased and is decidedly uncomfortable. Occasional aching in back of head. Pulse (usually 76) 90 (after two hours). Face flushed (after two hours). Vertigo, great dizziness (soon). Aching in brows, a feeling of constriction. Rapid sticking-shooting pain in left temple and left ear, at 9 P.M.; continued till I went to bed. Weight in stomach,* and uncomfortable feeling of indigestion, with uprisings of food and hot liquid; the uprisings of food tasted spoiled. Pain in bowels as if diarrhoea would follow, but it did not. A crampy constriction in heart, with a feeling as though I could not take a long breath; felt pulse to see if it was irregular; it was not; the same pain soon after in right chest. Aching in small of back.

III. Dr. Brugmans took a few grains in the morning. There followed violent headache, thirst, efforts to vomit, sticking pain in the epigastrium, cutting pain and flatulence, desire to sleep, and during the whole day a general cold feeling. Sleep was very restless for the first hours.

IV. Dr. Tournon took by mistake some in salad. He awoke with colic, vertigo, and weakness. Tea and a few glasses of wine removed the symptoms.

V. Dr. Roques treated a woman who had eaten *Æthusa* inadvertently. She suffered from cutting pain and violent vomiting, incessant anguish, and a feeling of weakness. The symptoms were relieved after a few doses of Laudanum.

RÉSUMÉ.

Mind.—Imagined she saw rats run across the room,*—A fixed idea, from which she could not free herself, of a garment made the previous day, of which she also dreamed,*—Liable to transports of rage,*—Excited, lively in the forenoon; apprehensive, sad in the afternoon,*—Hilarity, talkativeness, facetiousness,*—Great good-humor (second day); (seems to be the secondary action),*—[530.] Sadness when alone,*—Anxiety, characterized by a feeling of weight on the chest,*—Uneasiness, anxiety,*—Incessant anguish,*—Disposition becomes retiring and tearful, as in nostalgia,*—She looks very fretful and earnest, and does not talk willingly during the heat of the head; towards noon, better humored,*—Very ill-humored, fretful, in the afternoon,*—Peevish and ill-humored in the open air; after entering the house she again felt better (after one hour and a quarter),*—Awkwardness; discontent, even to vexation,*—Slowness or unsettled state of his ideas, even to absence of thought,*—Loss of comprehension; a kind of stupefaction, as if there were a barrier between his organs of sense and external objects,*—[540.] Somewhat stupid dulness, like an intoxication, soon after a dose,*.

Head.—*Confusion and Vertigo.* The head is confused during the coryza,*—Vertigo,*—Vertigo on awaking,*—Vertigo, with sleepiness, during and after rising from a seat (after quarter of an hour),*—Vertigo after every new dose, disappearing in the open air,*—Vertigo, with sleepiness; the eyes close involuntarily, soon after a dose,*—Vertigo in the open air,*—Vertigo, even in the open air; she was obliged to support herself to prevent falling,*—[550.] Sudden attack of vertigo while sitting, disappearing after rising (second day),*—Vertigo when sitting down, aggravated on trying to rise from his seat,*—The vertigo is more especially

felt towards midday.⁴—**General Head.** The head is inclined to fall backwards.⁴—Head dull, brain seems bound up (after two hours and a half).⁴—Rush of heat into the head, with increased warmth of the whole body, redness of the face, and relief of the vertigo (second day).¹—Head, face, and hands seem swollen; after walking in the open air; disappearing in the house (after one hour).¹—Heavy, undefined sensation in the head, like a general headache.¹²—Violent headache.⁶—General headache.¹⁰—The pains in the head are felt especially when he wakes up; they are easily brought on by getting chilled; sleep causes them to cease, and they are ameliorated by emission of flatus.⁴—[560.] The pains of the head return periodically; and are often accompanied with pale face, trembling in the jaws, and pain in the præcordial region.⁴—Feeling of tension in the head.⁴—Raging here and there in the head on entering the house, though lasting only a short time.¹—Sensation as if shattered in the head, in the afternoon.¹—Slight constricted feeling about the head.¹¹—Painful screwing-together from both sides of the head.²—Tearing pain in the head.⁴—Beating and sticking in the whole head, in the afternoon.¹—Throbbing in the head.⁴—Headache, throbbing in the head on entering the house from the open air (seventh day).¹—**Forehead.** [570.] Sensation of great heaviness in the whole forehead, which seems to press the head downward, with great ill-humor, while sitting (second day).¹—Sudden painless sensation of heaviness in the forehead, it seems to press down the eyelids, with fretful humor; during dinner (second day).¹—Headache in the forehead, shooting up over the eyes.¹²—Aching in brows, a feeling of constriction.¹³—Awoke with intense frontal headache, with sensation of constriction from points vertically over each eye; relieved by pressure.¹⁰—Violent pains in the forepart of the head, as if the head were compressed posteriorly and superiorly, with great force.³—Intermittent pains in the forehead, located vertically over each eye, in lines.¹²—Sensation of tension, as of a band passing around the forehead, and made fast at each zygoma.¹⁰—A sensation in the forehead as if something were turning around in it (third day).¹—Forehead feels constricted, and yet a sensation of pressure, as from within outward.¹⁰—[580.] Pressive but dull pain in the forehead, and then on the right side of the occiput (after one quarter of an hour).²—Pressure in the frontal sinuses and upper nasal passages.¹⁰—Crampy pain in the forehead, with disposition to contract the eyebrows.¹⁵—Jerking tearing in the frontal sinus, above the left eye, while sitting (second day).¹—Sticking in the forehead on turning the head to the right, in the afternoon.¹—Very painful throbbing in the left frontal region (fourth day).¹—**Temples.** Aching in left mastoid process.¹⁰—A sudden tear in the right temple, in the afternoon.¹—Rapid sticking-shooting pain in left temple.¹⁵—Pain in a small spot in the left temple, as if a bloodvessel had been torn out, lasting two minutes (second day).¹—[590.] Sticking in the left temporal region; then throbbing in the same place (after one hour and a quarter).¹—Sticking in the left temple; afterwards drawing in the head from below upward (after one hour and a quarter).¹—Violent sticking and throbbing in the left temple, disappearing on pressure, but immediately returning (after two hours and a half).¹—**Vertex and Parietals.** Pain in the vertex.⁴—Dull pain on the vertex (after one hour and a half).¹—Painful sticking and beating on the vertex, disappearing on rubbing it, in the afternoon.¹—Jerking in the right side of the head, and then sticking beneath the left mamma, very acute, especially on inspiration, in the afternoon.¹—Tearing and throbbing in the right side of the head, then again sticking

in the left half of the head (after five hours),¹.—Very painful sticking tearing in the left side of the head,¹.—Sticking and beating on the upper part of the right parietal bone (after two hours),¹.—**Occiput and External Head.** [600.] Sensation of heaviness in the occiput, and beating in the forehead,¹.—Occasional aching in the back of the head,¹⁶.—*Distressing pain in the occiput and nape of neck, extending down the spine; relieved by friction with hot whiskey. A feeling as if the pain in the back would be ameliorated by straightening out, and bending stiffly backwards, as in opisthotonos,*⁸.—A tearing in the right side of the occiput, which shoots through the whole head, and extends to the right side, in the afternoon,¹.—Tearing stitches extending forward from the occiput, in the afternoon,¹.—Sticking and beating in the upper part of the right side of the occiput (after five hours),¹.—Sense of contraction at the hairy scalp,⁴.

Eye.—The eyes are very wide open,⁴.—Swelling of the Meibomian glands; gum in the canthi,⁴.—Spasm of the eyes,⁴.—[610.] Distortion of the eyes during sleep,⁴.—The eyes close involuntarily from sleepiness, which disappears in the open air,¹.—Violent burning in the eyes in the house, as if smoke were in them (after half an hour),¹.—Pressure in the eyes,⁴.—Pain of excoriation around the eyes,⁴.—Tearing pain across the eyes,⁴.—Stitches around the eyes and in the orbits,⁴.—The eye-symptoms are generally felt on awakening, or in the open air,⁴.—Pain at the eyebrows,¹.—Eyes watery,¹¹.—[620.] Chronic inflammation of the edges of the eyelids,⁴.—Troublesome sensation around the eyelids,⁴.—Pain of excoriation in the lids,⁴.—Itching of the canthi,⁴.—Vision confused; sometimes objects appear double,⁴.—Objects seem enlarged, and sometimes double,⁴.

Ear.—Purulent discharge from the ears,⁴.—Stitching pain behind the ears,⁴.—Lancinating pain in the ears, from within outward,⁴.—Violent jerking in both ears, not removed by scratching,¹.—[630.] Sticking into the right ear (after three-quarters of an hour),¹.—Rapid sticking-shooting pain in left ear,¹².—Sticking in the left ear (after one hour); after the sticking fine tearing about the ear, extending to the top of the head,¹.—Sticking in the left ear, with a feeling as if heat were coming out of it, alternating with stitches in the left costal region (after five hours),¹.—At one time sticking, at another tearing in the right ear, only somewhat relieved by rubbing,¹.—Transient, though painful sticking in the right ear,¹.—Sticking in the right ear, removed by boring in with the finger,¹.—Sensation of heat escaping from the ear,⁴.—Sensation of stuffiness in perfectly sound right ear, with feeling of coldness in, around, and behind the same, seeming to be in the bone,¹⁰.—Dryness of the ears; want of cerumen,⁴.—[640.] Stopped sensation in the ears, with hardness of hearing, which lasted longer in the left ear (after one hour),¹.—Several of the ear-symptoms are ameliorated by contact and pressure,⁴.—Troublesome whistling in the ears,⁴.

Nose.—Sneezing once,¹.—Ineffectual desire to sneeze,⁴.—Inclination to sneeze in the left nostril (after half an hour),¹.—Coryza in the morning,⁴.—Coryza in the open air,⁴.—Coryza, with viscid secretion,⁴.—The coryza has a nauseous smell,⁴.—[650.] The coryza loosens on the second morning; much thick mucus is discharged,¹.—Sudden stoppage of both nostrils for a quarter of an hour (after five minutes),¹.—Sudden stoppage of the nose, lasting a quarter of an hour, in the morning after waking,¹.—Tension above the root of the nose,⁴.—Ulcerative pain in the fossa of the left side of the nose, as if there were an open spot,¹.—Sense of pressure in the nose,⁴.—Acute stitches in the left side of the nose externally, then a very fine

painful burning on the right side, then fine burning, as with a glowing needle externally, in the pit of the stomach,¹.

Face.—Face beginning to look peaked and hollow-cheeked,¹⁰.—Puffiness of the face during the menses,⁴.—The face has a tired look,⁴.—[660.] Face expressive of anguish,⁴.—Face flushed and hot,¹¹.—Jactitation of the muscles around the mouth,⁴.—Cheeks sunken,¹⁰.—Crampy aching in the malar bones, principally the left,¹⁵.—Tearing in both malar bones, and very painful, though only for a short time,¹.—Violent tearing in the left malar bone, in the cold air (fourth day),¹.—Sticking and tearing in the right malar bone; afterwards tickling in the left upper teeth; afterwards stitches in the left ear (after three hours),¹.—Dull stich like a tapping with the finger, with tearing in a small spot in the middle of the left cheek (second day),¹.—Chap on the upper lip,⁴.—[670.] Tearing in the lower lip, extending into the neighboring teeth, in the afternoon,¹.—Tearing in the right lower jaw (after one hour and a quarter),¹.

Mouth.—Teeth. A sort of shocks in the lower teeth,⁴.—Crumbling in a right lower back tooth, it seems as though the headache arose from the teeth (seventh day),¹.—Painful sensitiveness of a right lower decayed molar, still worse when touched (first day),¹.—**Gum.** Stitches here and there, in the gum (ninth day),¹.—Fine sticking and tearing in the gum, now in the right, now in the left side, frequently (eleventh day),¹.—**Tongue.** Dryness of the tongue,¹⁵.—Sensation as if the tongue were too dry,⁴.—**General Mouth.** Aphthæ in the mouth,⁴.—Redness and swelling of the velum pendulum and adjacent parts; distress so great that he fears suffocation,⁴.—[680.] Mouth and lips dry,¹⁰.—Burning in mouth,¹⁵.—**Saliva and Taste.** Sticking in the arch of the palate,⁴.—Inclination to spit and clear the throat,¹⁵.—Profuse salivation,¹⁵.—Insipidity in the mouth, with a sweetish taste in the morning after waking,¹.—Food all tasted alike, in fact was nearly tasteless,¹⁰.—Indescribable taste, both before and after a meal,⁴.—Sweetish taste, with dryness of the mouth (eleventh day),¹.—Taste of cheese in mouth,⁴.—[690.] Food tastes salt,⁴.—Metallic taste in the mouth,¹².—Metallic, slimy taste in the mouth, with dryness,¹⁰.—Taste of onions,⁴.—**Speech.** Slowness of speech,⁴.—Speech almost prevented,⁴.

Throat.—*Inflamed aphthæ and pustules in the throat, making the patient's condition almost desperate,*⁴.—Redness of the throat,⁴.—Dryness in the throat and frequent hawking (after two hours),¹.—Dryness of the throat,¹⁵.—[700.] A sensation in the throat, as though she could not swallow, with spasmodic contraction in the right side of the throat and ear, lasting an hour, in the afternoon while sitting (ninth day),¹.—Sharp stitches in the throat when not swallowing (second day),¹.—Burning in the throat,¹⁵.—Warmth and uneasy sensation in the œsophagus and stomach,¹².—Burning in the œsophagus,¹⁵.—Itching and scraping in the œsophagus,⁴.—A desire to swallow, as though to keep something down,¹⁰.

Stomach.—Appetite. Indisposition to eat, although the appetite was average fair,¹⁰.—Total loss of appetite for every kind of ailment,⁴.—Want of appetite, although with clean tongue,⁴.—[710.] Want of appetite, in the evening,⁴.—Thirst,⁵.—**Eructation.** Eructations after drinking,⁴.—Eructations of a rancid taste, causing burning in the œsophagus and throat,¹⁵.—Difficult eructations,⁴.—Eructations tasting of the broth (after one hour and a quarter),¹.—Empty eructations, in the afternoon,¹.—Up-risings of food,¹⁵.—The eructations are allayed by lying down,⁴.—Eructations, tasting of the ingesta,⁴.—**Hiccough.** [720.] Hiccough, in the evening,¹.—Waterbrash of sour, hot fluid,¹⁵.—Heartburn,¹⁵.—**Nausea.**

and Vomiting. Nausea,^{11 12 14 15}.—Nausea, with prostration,⁴.—Nauseated at the sight of food,¹⁰.—Sensation of nausea extended down the œsophagus and into the stomach, with rumbling and gurgling in the stomach and upper bowels, and a sensation of fluttering motion in the stomach,¹⁰.—Instantaneous sensation of nausea, confined to the mouth and pharynx,¹⁰.—Efforts to vomit,⁵.—Retches, and threw up phlegm,¹¹.—[730.] Vomiting, with chills, sweat and debility,⁴.—**Stomach.** General feeling in the stomach, as if I had been on a spree last night,¹⁰.—A sensation in the stomach, as if something had become turned about, then an uprising burning sensation extending into the chest (after one hour and a quarter),¹.—Weight and heaviness in the stomach, which lasted two hours,¹³.—Weight in stomach,¹⁵.—Feeling as of an indigestible load in my stomach,¹⁰.—Uncomfortable feeling of indigestion,¹⁵.—Slight uneasiness in the stomach, as if a precursor of an attack of gastric catarrh,¹³.—Feeling in stomach and bowels, as if diarrhœa were coming on,¹⁰.—*Painful contraction of the stomach*,⁴.—[740.] *Painfulness of the epigastric region*,⁴.—Burning in the stomach,¹⁵.—Pains in the stomach and upper bowels, as though caused by something hard and indigestible,¹².—Cutting pain and violent vomiting,⁷.—Sticking pain in the epigastrium,⁵.—Dull sticking in the side near the stomach, extending deeply inward on sitting bent over, disappearing on becoming erect (first day),¹.

Abdomen.—Painfulness of the hypochondria,⁴.—A painful pressing inward and a burning with stitches in the left hypochondrium, twice in quick succession (after one hour),¹.—A stitch in the right hypochondriac region, and immediately afterwards in the right ear, in the afternoon,¹.—Sticking in the left hypochondriac region, frequently, and lasting a long time (after four hours),¹.—[750.] Constant stitches in the left hypochondriac region, with burning, only transiently relieved by rubbing,¹.—A stitch in the left hypochondriac region, extending backward, then sticking deep internally beneath the left female breast, in the afternoon,¹.—Painful movings about below the navel, with desire for stool, after the morning broth; followed after a few minutes by a hard stool (after one hour),¹.—A rush as of boiling water in the umbilical region, followed by griping in the stomach,¹.—In the morning after rising, at first some griping about the navel, and then two soft stools,¹.—A sudden burning, as from a glowing hot needle, at one time in the left loin, then in the right hypochondriac region (after four hours),¹.—Digging sensation in the abdomen,⁴.—Sensation of load in upper bowels,¹⁰.—Warmth in the upper bowels,¹².—Sharp cramps in the small intestines, localized in spots, and quickly shifting from place to place,¹⁰.—[760.] Sensation in the upper bowels as if she had taken a dose of medicine, which was working,¹⁰.—Colic on awaking,⁶.—Pain in bowels, as if diarrhœa would follow,¹⁵.—A painful cutting as with a knife in the abdomen, above the navel (second day),¹.—Cutting pain and flatulence,⁵.—Throbbing in the abdomen,⁴.—Movements in the abdomen, followed by a stool, the first part of which is hard, the last soft,¹.—Sensation of great coldness in the whole upper abdomen, immediately after a dose,¹.—Sensation of coldness in the abdomen after every dose,¹.—Coldness in the region of the transverse colon,¹⁵.—[770.] Cutting in the lower abdomen, with urging to stool; a soft stool follows, succeeded by tenesmus and continued straining (tenth day),¹.

Rectum and Anus.—Feeling as if the hæmorrhoidal tumors were excoriated,⁴.—Contraction of the rectum,⁴.—All the symptoms disappear

after broth, but return after half an hour,¹.—Sensation of dryness at the anus,⁴.

Stool.—Loose discharge from the bowels, of a yellow color and sour smell,¹⁴.—Very hard stool, with clawing in the anus, and great straining (second day),¹.—*Stools of partly digested food, shortly after a meal or at night,⁴.—Constipation,⁴.—*Most obstinate constipation*, with feeling as though all action of the bowels had been lost,⁸.

Urinary Organs.—[780.] Cutting pains at the bladder,⁴.—Frequent urging to urinate,⁴.—Frequent urging to urinate at night,⁴.—Urine increased,¹⁰.—Increased flow of urine, of a sweet odor,¹².—Copious emission of urine,⁴.—Excessive flow of pale urine,¹⁰.—She passes much urine as pale as water, three times (second day),¹.—Urine diminished,¹⁰.—Red urine voided with difficulty,⁴.—[790.] Urine depositing a white sediment,⁴.

Sexual Organs.—Awakened with a strong sexual desire,¹⁰.—Sexual desire diminished,¹⁰.—Stitching pains in sexual parts (female),⁴.—The menstrual blood is watery,⁴.

Respiratory Organs.—Slight cough,⁴.—Cough, aggravated by lying down,⁴.—Cough, with stunning pain in the head,⁴.—Cough, with titillating sensation in the throat,⁴.—Frequent short hacking cough (after half an hour),¹.—[800.] Cough, with tearing pain in the chest,⁴.—Cough, with sweetish taste in the throat,⁴.—Cough, with paleness of the face,⁴.—Cough, followed by mucous expectoration,⁴.—Dry cough in several paroxysms, after dinner (after four hours),¹.—Hoarse breathing,⁴.—Sibilant respiration,⁴.—Hoarse and sibilant respiration, especially when lying on the back,⁴.

Chest.—Sensation of pressure, as from a band around the chest,⁴.—Crampy constriction in the right chest,¹⁵.—[810.] An incessant painful dull stitch in the middle of the chest on inspiration, on rising after sitting bent over; the pain was aggravated by deep breathing; 6.30 p.m. (first day),¹.—A sharp stitch in the middle of the sternum, followed by burning in the same spot, so that she thought it was all over with her, disappearing on pressure, but returning (after five hours),¹.—Digging and tension in the right thorax, in front of the axilla,¹.—Painless tension in the region in front of the right axilla, while knitting in the evening (fifth day),¹.—A stitch in the region of the right ribs, in the afternoon,¹.—Swelling of the mammary gland,¹.—Burning, as from a glowing hot iron in a small spot below the left breast (second day),¹.

Heart and Pulse.—Crampy constriction in heart, with a feeling as though I could not take a long breath,¹⁵.—Palpitations which resound in the head,⁴.—Palpitation, with vertigo, headache, and restlessness,⁴.—[820.] Small, frequent, irregular pulse,⁴.—Pulse decreased in frequency, and soft,¹⁴.—Pulse (usually 76), 90 (after two hours),¹⁵.

Neck and Back.—Drawing pain in the right side of the neck, as if a tendon or a bloodvessel would be torn out, disappearing on rubbing (eleventh day),¹.—Painful tearing in the tendons in the right side of the neck (seventh day),¹.—Violent tearing in a spot of the breadth of two fingers on the right side of the neck (second day),¹.—A sharp stitch extending inward in the left cervical muscles, then a similar stitch in the upper part of the left parietal bone, then a beating in the whole head, more on the right side and backward, with a feeling of heaviness,¹.—Stick-ing jerking in the nape of the neck (after two hours),¹.—Throbbing tearing in a small spot on the tendons, on the left side of the neck (second day),¹.—Weak feeling in the back,⁴.—[830.] Pulling in the back,⁴.—Pain-

ful aching about the left scapula, sometimes extending into the left arm; attempt to relieve it by rigid expansion and closing the fist, as in a tonic spasm.⁸—Pain between shoulderblades on waking in the morning.¹⁰—A violent stitch between the scapulae.¹—Burning externally in the small of the back, disappearing after rubbing.¹—Aching in small of back.¹⁵—Heavy aching pain in my back across my kidneys, on waking, in the morning.¹⁰—Frequent sensation in the small of the back, as if screwed together.¹—Drawing in the right lumbar region while walking, disappearing on sitting (after one hour and a quarter).¹—A stitch in the right lumbar region, then a sensation of slight pressure, as though a light body were lying there (after one hour and a quarter).¹

Extremities.—[840.] Sleep prevented by pains in the limbs.⁴

Superior Extremities.—*Numbness of the arms.*⁸—Sensation, as if the arms had become much shorter; so vivid that she had to examine them in the morning to be convinced that it was not actually so.⁸—Paralyzed sensation on the left shoulder, afterwards in the right forearm (second day).¹—Tension at first on the left, then on the right shoulder; very painful (first day).¹—Pain in the axillary glands.⁴—Arthritic stiffness of the elbow-joint.⁴—Sensation of great weakness in the right forearm, a hand's breadth above the wrists, extending to the little finger (fifth day).¹—Sudden weariness of the forearms while knitting; she was obliged to lay it aside, when it became better (after a quarter of an hour).¹—Heaviness of the forearm.⁴—[850.] Paralytic pain in the left forearm while sitting (second day).¹—Tension in the tendons of the left forearm while flexed, she did not dare to extend it, and yet the tension was relieved only by extending and moving the fingers; while knitting (after five minutes).¹—Fine tearing in a small spot on the inner surface of the left forearm.¹—Sticking tearing in the middle of the left forearm, along the upper surface, as far as the wrist.¹—Sticking in the tendons of the right forearm while using the hand (first day).¹—A stitch in the left external styloid process (of the wrist), (after one hour and a half).¹—Cramp of the hand.⁴—Frequent tearing on the back of the right hand, in the tendons of the thumb, for several days (seventh day).¹—Tearing in the metacarpal bone of the right index finger (second day).¹—Tearing in the metacarpal bone of the left index finger.¹—[860.] Tearing between the little and ring fingers of the hand, aggravated on stretching them out (second day).¹—Swelling of the fingers.⁴—Contraction of the fingers.⁴—Formication in the fingers.⁴—Jerking in the left thumb (after two hours).¹—Jerking tearing between the first and second joints of the left thumb, as if in the marrow (second day).¹—Extremely painful sticking in the ball of the left thumb on flexing it, less on extending it (first day).¹—While sewing a sensation in the left thumb as if it were stiff and immovable, and as if she could not extend it, which, however, she was able to do (first day).¹—A fine sticking as from a thistle in the left side of the tip of the right index finger, which disappears on pressing on it a long time (after a quarter of an hour).¹—Tearing on the lower surface of the third joint of the right little finger.¹

Inferior Extremities.—[870.] Great weakness of the lower extremities (third day).¹—Boring pain in the lower extremities.⁴—Lancinating, tearing pain in the lower extremities.⁴—Formication referred to the bones of the lower limbs.⁴—Tension in the right hip, then again sticking tearing in the right ear, in the afternoon.¹—A pinching in the right hip, externally (after two hours and a half).¹—Sticking and drawing from the

left hip into the thigh,¹.—Paralytic pain in the middle of the right thigh while sitting, disappearing on motion,¹.—Sticking in the upper part of the left thigh,¹.—Sticking in the right knee, in the evening while standing,¹.—[880.] Tearing deep in the right instep, in the afternoon,¹.—Sticking in the right sole, below the heel (after five hours),¹.—Tearing sticking in the right heel, extending thence into the sole, as far as the ball of the foot (after three-quarters of an hour),¹.

Generalities.—Secretions diminished,¹⁰.—Feeling of weakness,¹.—Weakness on awaking,⁶.—Great weakness and prostration, with sleepiness (second afternoon),¹.—Wakened in the morning with a sort of seething feeling in my blood,¹⁰.—Weak feeling, like paralysis, when raising himself in bed, when turning in bed, and during movement,⁴.—She thinks she is much better and fresher after entering the house from the open air,¹.—[890.] Reacted more freely than usual from my shower-bath (second morning),¹⁰.—Numerous fine sharp stabbing pains, lasting five minutes,¹⁰.—Clothes seem loose,¹⁰.—Symptoms relieved after a few doses of iudandum,¹.—Tea and a few glasses of wine removed the symptoms,⁴.—Most of the symptoms disappear in the open air, but soon return in the house,¹.

Skin.—Skin had a dry, white, leathery, pinched look,¹⁰.—Herpetic eruption itched very much from the heat, especially in the evening,⁴.—Small vesicles on the skin of the face,⁴.—Yellowish spot on the upper lip,⁴.—[900.] Pimply eruption on the genitals (female),⁴.—A painful boil in the sacral region,¹.—Skin of hands dry and shrunken, as if they had been washed in lye, especially on the palmar surface,¹⁰.—During one day appearance and disappearance of reddish-blue spots on the trunk and left leg, causing the patient to fear an attack of spotted fever,⁸.—Excessive sensitiveness,⁴.—Tingling, itching,⁴.—Itching from the heat,⁴.—Itching of the least affected portions of the skin; they swell up,⁴.—Itching at the sexual parts (female),⁴.

Sleep.—Desire to sleep,⁵.—[910.] Sleepy, without yawning, in the afternoon,¹.—Sleep very restless for the first hours,³.—Slight spasmodic movements during sleep,⁴.—Frequent waking, caused by a feeling of cold,⁴.—Sleep broken by frequent waking,⁴.—Waking up, followed by several hours of sleeplessness,⁴.—Fatiguing dreams, in the morning,⁴.—Troubled dreams,⁴.

Fever.—Chilliness. Chilliness through the whole body, and external coldness, without thirst, lasting two days,².—Violent chill and external coldness, so that he could not get warm in the forenoon, soon after a dose, with sleepiness, which lasted the whole day,².—[920.] Shivering, which is more frequent in the afternoons,⁴.—Horripilation in the open air,⁴.—During the horripilation the limbs feel as if broken, with hot breath and restlessness,⁴.—Shivering on entering the house from the open air (second day),¹.—Horripilation, with heat, which pervades the whole body,⁴.—General coldness,⁴.—During the whole day a general cold feeling,⁵.—General coldness during sleep,⁴.—Coldness, with red face,⁴.—He cannot bear to be uncovered during the sweat,⁴.—[930.] Internal coldness,⁴.—Sensation of coldness at the chin, and at the labial commissures,⁴.—Coldness of the abdomen, both objective and subjective, with aching pain in the bowels (relieved by warm wet applications), accompanied by coldness of the lower extremities, particularly the left one,⁸.—Coldness of abdomen and lower extremities,⁸.—Coldness of lower extremities, particularly the left, with coldness in abdomen, etc.,⁸.—Feet and limbs cold, nearly to the knees,¹⁰.—**Heat.** The febrile symptoms occur more particularly in the morning, and are accom-

panied with very great malaise and tendency to delirium, which cease during the sweat.⁴—Heat all through the body.¹²—Heated, flushed feeling, as if she had taken a glass of liquor.¹¹—Feeling of glow over the entire body on waking in the morning.¹⁰—[940.] General peripheral sensation of warmth within five minutes.¹⁰—Burning heat of the skin.⁴—Heat in the head and burning in the face, lasting half an hour (after one hour and a half).¹—Heat and pressure in forehead.¹⁰—Sensation of heat and fullness in the face.¹⁰—Sensation of heat extending up the back, in the afternoon.¹—**Sweat.** General perspiration.⁴—Perspiration increased.¹⁰—Sweat when going to sleep.⁴—Perspiration on the forehead.¹²—[950.] Sweat on the face.⁴—Cold sweat on the face.⁴

AGARICUS.

Agaricus muscarius.

Authority. 49, E. W. Berridge, M.D., N. Y. Journ. of Hom., vol. ii, p. 460, Mrs. — took 99 m. (Fincke).

Felt sleepy, on and off, during the day.

AGARICUS PANTHERINUS.

Authority. 2, Petersen, Hosp. Tidende, 1877 (S. J., 176, p. 229), effects of eating the fungi.

The answers were monosyllabic, with an expression of annoyance.²—Loss of consciousness.²—[20.] On the next day after his consciousness had returned, and he was feeling pretty well, he tried to rise, but fell down in the most violent general spasms, followed by gradual return of consciousness.²—Vertigo.²—Eyes partly open.²—Conjunctiva injected.²—Face congested.²—Violent convulsive twitchings of the muscles of the face and extremities.²—Respiration stertorous and irregular; after a few deep inspirations the respirations became weaker and weaker, until at last they ceased entirely for about a quarter of a minute, when there were again deep inspirations.²—Restless tossing about.²—Heat in the head.²

AGARICUS PHALLOIDES.

Authorities. 2, Dr. Carresi, Annal. Univ. de Cuivdiè, 1829 (Lancet, 1829–30 (1), p. 758), a family of five persons ate of a dish of mushrooms; 3, Maschka, Prag. Vjs., 46, 1855, p. 138, poisoning of seven persons by eating the mushrooms; 4, Dr. Michel, Gaz. Hebdom., 1876, three cases of poisoning.

Mind.—Coma and rattling respiration before death.³

Head.—Vertigo always on rising up, without loss of consciousness.³—[90.] Violent pains in the head.³

Eye.—Pupils dilated.³

Face.—Face pale, sunken; eyes sunken, weak, and lustreless; nose and mouth dry.³—Tetanic closure of the jaws, with at times grating of the teeth.³—Speech stammering.³

Throat.—Constant burning sensation in the pharynx after vomiting.³

Stomach.—Violent vomiting and diarrhœa.³—No vomiting.³

Abdomen.—Abdomen meteoric.³—Abdomen sunken.³—[100.] Vio-

lent pains in the abdomen,³.—Violent pain in the abdomen, with vomiting and diarrhœa,³.—Spasmodic constrictive pain in the abdomen, extending into the lower extremities, after the stools,³.

Stool.—Involuntary stools,³.—Stools yellowish-white, liquid,³.

Urinary Organs.—Secretion of urine scanty,³.

Pulse.—Pulse rapid, thready,³.—Pulse very small and rapid,³.—Pulse at the wrist not felt in two cases, but in the carotids it was very weak and rapid,³.

Extremities.—Convulsions of the upper extremities,³.—Lower extremities bluish,³.—Lower extremities cyanotic,³.

Generalities.—*First Case.* A woman, æt. thirty-three years, ate a quantity of the mushrooms at dinner. At 10 P.M. she was taken with a very severe headache and intense thirst, soon followed by pains in the abdomen, vomiting of black substances, but no stools. At 4 A.M. she had an emetic and a cathartic, which produced profuse vomiting and diarrhœa. The next day she was admitted to the hospital; the skin was cold and dry, the eyes sunken, the face had the aspect of one suffering from cholera; the pains in the abdomen were very severe, and forced cries from the patient. The vomiting and hiccough continued, and the patient complained excessively of burning heat in the throat, and of violent pains in the articulations, especially of the ankles, aggravated by movement. The abdomen was very sensitive, but not tympanitic. The pulse was small and rapid, the body very cold, but the extremities were not violet. The cutaneous sensibility was decidedly diminished, especially over the chest, abdomen, thighs, and arms. The pupils were irregularly and considerably contracted, the left forming a mere black central point, the right being a little larger; both were insensible to light. She responded slowly to questions, constantly complained of the articular pains, from time to time became much agitated and uttered cries. There were frequently involuntary black stools, without tenesmus. The temperature was 36.6°.

Second Case.—A woman, æt. thirty-three years, ate some of the mushrooms. Eight hours afterwards she noticed weakness of the limbs and intense thirst; about 9 o'clock she was seized with the most intense pains in the abdomen. At 11 o'clock there were vomiting and diarrhœa, with tenesmus; the vomiting was incessant, accompanied by very violent pain in the pit of the stomach and throat. Extreme restlessness caused by the pain; she could not remain in bed. Thirst was intense, but she vomited everything she took. The next day, at 5 P.M., the skin was cold and dry, there was profound prostration, and the stomach and abdomen were painful. There was incessant hiccough, from time to time, accompanied by regurgitations. Pulse small, rapid. Heart's action very feeble, but not irregular. Diarrhœa very profuse, without odor. There was no urine. Pupils contracted, but mobile. Skin cool, temperature 37.8°. She received syrup of ether, coffee, and digitalis.

Third Case.—A man was brought to the hospital in a state of profound coma; the face was bluish, cyanotic, eyes sunken, devoid of expression, pupils contracted, heart's action very slow, exceedingly feeble. Pulse imperceptible, respiration stertorous. Extremities cold; nails blue. The patient looked like one suffering from cholera. Complete loss of sensibility. It was stated that after eating the mushrooms he was taken with violent pain in the abdomen, diarrhœa, vomiting, and chilliness, and fell into a state of coma, when the vomiting and diarrhœa ceased. Just be-

fore death respiration became feeble, the heart ceased to beat, and the pupils became wildly dilated,¹.

Two hours afterwards seized with headache, giddiness, violent pain in the stomach, sickness, ardent thirst, and trembling of all the limbs, and had ultimately fallen into a comatose state. The mother and eldest son, who was an adult, vomited freely, with considerable relief; the others passed the whole night under violent pain in the stomach, great sickness and retching, ischuria, tenesmus, and general convulsions. In the morning all dangerous symptoms had subsided, except in the youngest boy, who had refused to take the emetic, and who was senseless, with general convulsions, trismus, tympanitis, and great dyspnoea; his eyes were staring, the countenance flushed, the extremities cold, and the pulse hard and intermitting. Under these symptoms he died, apparently suffocated. The others complained of very violent colic, pains around the navel, and giddiness, and one of the girls was affected with hiccough,².—[110.] Rigid and speechless,³.—Patient extremely weak,³.—Great restlessness, tossing about the bed; convulsive movements of the extremities,³.

Skin.—Skin pale and cold,³.—Skin cold,³.

AGARICUS STERCORARIUS.

Authority. Thos. Stevenson, M.D., Guy's Hosp. Reports, vol. xix, p. 418, R. M., æt. thirty-nine years, ate about a pint stewed with bacon.

In half an hour he complained of nausea, some oppression in his breathing, and of severe pain across the forehead, with giddiness. His wife now noticed a strangeness in his appearance, and that in attempting to walk he kept his eyes fixed on the ground and guided himself with difficulty. He was, however, quite conscious of everything, and opened a book to see if he could read, but found that he was unable to make out any of the letters. When out of doors he continued to suffer severely from the pain across the forehead, with giddiness, and in addition, experienced a feeling as if something was continually over his head, or as if passing "through an arcade." He also staggered much. About 11 p.m., after more than three hours, Mr. Hicks was called to see him. He found him sitting down in a semistate of stupor, with pupils dilated and inactive, and the pulse slow and feeble, from 55 to 60. On being roused and made to get up he looked completely bewildered, staggered as if tipsy, and said he could not recognize the things in the room, nor the room itself as that which he usually occupied. He now became more restless, threw his arms about, and seemed anxious to be continually moving from place to place. He also appeared to be somewhat convulsed, with twitching of the muscles of the face, and complained of prickings in his hands, and of a feeling as if they were swelling. He suddenly became more excited, and rushed wildly out of the house into the street. He was found in a neighbor's house, considerably prostrated after his exertions, and in a very lethargic state. Twenty grains of Sulphate of zinc were now administered, and in a short time vomiting ensued, much dark fluid with numerous pieces of fungi being brought up. For a short time afterwards he expressed himself as feeling better, and was allowed to be taken to the door of the cottage. Almost immediately afterwards, as if moved by a sudden impulse, he again rushed wildly out, but after going a short distance stopped suddenly, as if bewildered. Emetics were again administered and the stomach-pump used, and in the

course of a few hours he gradually recovered, though feeling much prostrated. He said that during the whole time he was quite conscious of what was being done, but that at times he felt drowsy and inclined to sleep. When the convulsive paroxysms came on he felt wild and excited, with an irresistible desire to move about and to run. He had no pain in the stomach or bowels at any time, nor did the feeling of oppression in his breathing continue after the first symptoms.

AGKISTRODON CONTORTRIX.

Copperhead snake.

Authorities. 1, Mr. Arnold, *Med. Times and Gaz.* 1873 (2), p. 461, symptoms produced on John Brown by the bite; 2, Mr. A'Beckett's account of the same case, *ibid.*; 3, Mr. Woolridge's account, *ibid.*; 4, E. M. Schaeffer, M.D., *Field and Forest*, vol. i, p. 12, a man, æt. twenty-one years, was bitten on the right hand.

Symptoms of coma (after two hours),¹.—Semiconscious state (after some hours),².—Cornea insensible to touch (after six hours),³.—Pupils sluggish and dilated (after some hours),².—Pupils possessed only of the minutest power of contraction and considerably dilated (after six hours),³.—Indistinct vision (after two hours),¹.—Wild appearance of countenance,¹.—Countenance rather approaching a livid hue, features swollen (after six hours),¹.—Considerable swelling about the upper lip (after two hours),¹.—[10.] Vomiting (after two hours),¹.—Breathing rather slow (after six hours),¹.—Weak pulse (after two hours),¹.—Pulse slow and very weak (after some hours),².—Pulse of large volume, weak, and about 70 (after six hours),³.—Limbs paralyzed (after six hours),³.—Pain in the finger,¹.—Paralysis of lower extremities (after two hours),¹.—Stiffness of the legs,¹.—Complete prostration (after two hours),¹.—[20.] Drowsiness (after two hours),¹.—Cold perspiration (after two hours),¹.—Surface of body cold and clammy (after some hours),².—The wound *at once* gave him some pain, like the sting of a wasp, as he described it, and in a few minutes he began to vomit. This continued until his stomach was emptied, when he still experienced violent retching. He then became deadly faint, and lay down. Dr. Kleinschmidt described his appearance four hours later as that of a person in the last stage of collapse; skin cold, pulse nearly gone, respiration feeble, and pupils widely dilated, with great dimness of vision. The right hand and arm were fearfully swollen, of a grayish-black color, resembling gangrene. He passed a feverish night, but was much better Sunday. On Monday evening I found him nearly free from pain, though the arm was still swollen to nearly the size of a man's thigh. From this time he progressed rapidly towards recovery, and in less than a week was out, with his arm in a sling,⁴.

AGROSTEMA GITHAGO.

Dr. Scharling, *Cent. Blat.*, 1850, in *Pharm. Journ.*, vol. x, p. 349 (New Eng. Med. Gaz., vol. xi, p. 305), effects of Githargin.

A burning sensation is felt on palate in a short time.

AILANTHUS.

Authority. 15, C. A. L., Pub. of Mass. Hom. Med. Soc., vol. iv, p. 119, a proving.

[210.] P., a student of medicine, aged nineteen, in good health. Took 1 drop of 1st cent. dilution every hour from 8 A.M., March 4th.

At 10 A.M. Lancinating pain through both temples, and fine prickling pain in left temple. Burning in, and darting pains through the stomach.

12 M. Tired sensation of lower limbs, chills over the whole body as from water, and sharp pains through both lungs.

1 P.M. After dinner, sinking feeling in stomach.

3 P.M. Severe constriction of the throat.

8 P.M. Sharp prickling pain in the stomach and temples.

March 5th, 10 A.M. Aching in left lung. Discharge of bright-red blood from the nose, which was swollen.

11 A.M. Severe nausea, as from fat meat.

1 P.M. Sharp pain through both temples.

3 P.M. Lancinating pain through the whole lower limbs.

6 P.M. Throat feels very full.

March 6th, 7th, and 8th. No new symptoms.

March 9th, 9 A.M. Bleeding from the nose and sharp pains through both lungs; worse when taking a long breath.

12 M. Mouth very sore, and feels raw and burning, as if from the presence of acid.

1.30 P.M. Lancinating pains in both temples, and deathly faintness of the stomach after dinner, lasting an hour and a half.

4 P.M. Sensation as from a blow in right ear.

6.30 P.M. Trembling of the legs.

March 10th, 8 A.M. Mouth sore and raw, and oozing of blood from the denuded surface. Faint feeling, with nausea. Sharp pains in both lungs, and in the stomach, as from pins.

12 M. Ringing in right ear.

2 P.M. Bruised sensation on the right forearm.

5 P.M. Mouth very sore and painful, discharge of blood from the swollen gums.

March 12th, 8 A.M. Dryness of the mouth, and bleeding from the roof and sides. Nausea in the abdomen.

10 A.M. Sharp pain through the right temple, with nausea.

3 P.M. Pricking pain through left lung. Trembling of the legs. Ringing in the ears, like music.

March 15th, 8 A.M. Mouth continues very sore, with discharge of blood and stringy mucus. Teeth feel as if he had taken acid in the mouth.

10 A.M. Pains in lungs return, and trembling of the legs and bruised sensation of right forearm. Constriction of the throat, with sensation of a foreign body there for about ten minutes after every dose of the medicine. Took same doses up to the 25th, with no new symptoms,¹⁵.

ALCOHOL.

William A. Hammond, M.D., Amer. Journ. of Med. Sci., October, 1856, p. 305.

First Experiment.—The action of Alcohol where a uniform weight of the body was preserved. Took 12 drachms of Alcohol daily for five days.

My weight increased from an average of 226.40 pounds to an average of 226.85 pounds, being .45 of a pound difference. The carbonic acid and vapor of water in the expired air had respectively decreased 1324.50 and 196.51 grains, the feces 1.22 ounces, the urine 3.43 ounces, the urea 87.19 grains, the chlorine 37.59 grains, the phosphoric acid 24.47 grains, and the sulphuric acid 13.40 grains. The free acid and uric acid* (especially the former) were so slightly affected as to render it probable that the Alcohol had exercised no influence upon them.

During these experiments, my general health was somewhat disturbed. My pulse was increased to an average of 90 per minute, and was fuller and stronger than previously; there was headache and increased heat of the skin, and my mental faculties were certainly not so clear as on the days when no Alcohol was taken. There was general lassitude, and indisposition to exertion of any kind. My appetite was variable. The amount of flatus discharged from the intestines was sensibly diminished.

Second Experiment.—The action of Alcohol when the body lost weight from a deficiency of food. Took 12 drachms daily for five days.

During the experiments immediately preceding these, my weight decreased an average of .28 of a pound daily, falling from 226.73 pounds to 225.34. In the present series, under the same conditions, except the use of the Alcohol, this decrease has not only been overcome, but there is an actual average daily increase of .03 of a pound, the weight rising from 225.34 to a mean of 225.50 pounds. The mean weight of the body is less than the mean of the last series, owing to the fact that the average daily gain is not so great as the previous average daily loss. The carbonic acid decreased on an average of 129.08 grains, the aqueous vapor 312.06 grains, the feces .19 of an ounce, the quantity of urine 1.37 ounces, the urea 54.51 grains, the chlorine 10.08 grains, the phosphoric acid 8.70 grains, and the sulphuric acid 6.11 grains. The free acid of the urine, and the uric acid, were apparently slightly increased. The general condition of the system was never better.

Third Experiment.—The effects of Alcohol when the body gained weight from an excess of food. Took daily, for five days, 12 drachms of Alcohol.

During the series of experiments immediately preceding the present, the average daily increase of weight was .22 of a pound. By the action of the amount of Alcohol, the average increase was raised to .31 of a pound per day. The average amount of carbonic acid excreted, compared with the mean of the last series, was reduced to 581.99 grains, the aqueous vapor 266.21 grains, the feces 2.34 ounces, the urine 4.15 ounces, the urea 93.27 grains, the chlorine 26.92 grains, the phosphoric acid 8.29 grains, and the sulphuric acid 14.87 grains. The free acid and uric acid were but slightly affected. The perspiration was sensibly diminished. The healthy action of my system was very much disturbed. Headache was constant, sleep was disturbed, the skin was hot, pulse full and bounding, averaging 98 per minute, and there was on two occasions after eating, slight palpitation of the heart. My appetite was capricious. Sometimes disgust was created by the mere sight of food, at other times I ate with a good relish.

ALDEHYDE.

Hydrate of oxide of acetyl.

J. Y. Simpson, M.D., Pharm. Journ., vol. vii, 1848, p. 517.

Out of five of us that attempted to inhale Aldehyde, very carefully prepared and purified, four were driven to suspend the respiration of it in consequence of the coughing and insufferable feelings of dyspnoea which it immediately induced. The sensations of difficult respiration and constriction in the chest which the vapor produced, resembled precisely those of a severe fit of spasmodic asthma. In the fifth case, the experimentalist, after perseveringly breathing the Aldehyde for a minute or two, became entirely insensible; the state of anæsthesia lasted for two or three minutes, during which the pulse became excessively small and feeble. On recovering, the bronchial constriction and coughing, which had disappeared as the anæsthesia was induced, returned immediately, and was annoying for some time.

ALSTONIA.

Alstonia (constricta?).

Dr. Augustus Cathcart, Am. Hom., vol. i, p. 142, effects of large doses (from the bark).

Invariably producing great debility and general prostration, or low fever—often also with diarrhoea—and when pushed sufficiently far, rigors, sweats (usually cold), and other symptoms resembling fever and ague.

ALUMEN.

Authorities. 19, Dr. Barthez, Rec. de Mem. de Med., etc., 1835 (Frank's Mag., vol. iii, p. 675); 20, Hicquet, Annal. d'Hyg., 39, p. 192, a man, aged fifty-seven years, took 30 grains Alum in water, by mistake for salts; 21, Helen J. Underwood, M.D., copied from MSS.

Took, fasting, a dose of $\frac{1}{2}$ drachm Alum in 1 ounce distilled water. He noticed contraction in the whole mouth, which lasted about a quarter of an hour, with very acute pressure in the stomach. During the rest of the day there were no marked symptoms. Three days afterwards took 1 drachm Alum in 2 ounces of water. This was followed by more violent contraction than before; the appetite was not diminished, on the contrary, he rather thought that it was improved, and that digestion was rather better than usual. After this he took doses, increasing every time by $\frac{1}{2}$ a drachm, until he took 2 $\frac{1}{2}$ drachms at once. After the last dose he experienced violent inclination to vomit, lasting nearly a quarter of an hour, followed by vomiting. Through the day there was decided disturbance; the inclination to vomit seemed to depend rather upon the astringency and disagreeable taste of the Alum than upon any irritating influence on the stomach. Six days afterwards he took fasting 3 drachms at a dose, and in three or four minutes vomited twice a portion of the solution. Through the day there were no symptoms and no pain in the abdomen; only two or three days afterwards the stools were more difficult than usual. The vomiting spoken of occurred without effort and without previous nausea.¹⁹—Sensation of dryness and burning in the mouth, throat, and stomach. Incessant nausea and vomiting of only blood; extreme anguish. Pulse

small, rapid; afterwards intermittent and thready. Respiration rapid. Skin cold. Deglutition impossible,²⁰.—Every time this patient takes 3c. She feels a sort of metallic sensation about the urethra; also a feeling in the clitoris as if the urethra lay there, and the urine were pressing to be expelled, and a feeling that the urine could not be retained on account of the pressure on the clitoris. This she never feels except after taking the Alumen,²¹.

AMBROSIA ARTEMISIÆFOLIA.

Ambrosia artemisiæfolia, L.

Natural order, Compositæ.

Common name, Rag-weed.

Dr. E. J. Marsh, *New Remedies*, vol. v, 1876, p. 273.

For the past three years I have experimented, intentionally and accidentally, and produced all the earlier symptoms of hay fever, severe coryza, etc., by the direct application of the pollen to the mucous membrane of the nose. For instance, last week, I wished to observe the pollen of another variety of *Ambrosia* "trifolia" or giant rag-weed. I gathered a few heads and put them in water to ripen, then examining the dust pollen under a microscope, and not taking care to prevent it flying in the air, suffered all that day with coryza. I tried the experiment two years ago in the same way, by ripening it prematurely, while I was still well and unaffected, and with the same serious consequences. After going to the White Mountains, and being entirely recovered, I found a small patch of rag-weed, and with another victim made the same experiment, and equally successfully, so successfully that we suffered several days.

AMMONIUM BROMATUM.

Authorities. 4, Clark and Amory, *Monograph on Bromide of Potassium*, p. 165, a student took 40 grains in 1 ounce of water, at 7 P.M.; 4a, the same, at 2.45 P.M. next day, took a rectal injection of 40 grains in mucilage of starch; 5, another student, took 40 grains in a claret glass of water, on an empty stomach, at 10 P.M.; 5a, same, took 20 grains on a full stomach, at 12 o'clock, before retiring to bed; 6, Dr. Borlow, *Lancet*, 1877 (1), p. 839, effects on a girl, with laryngismus.

Within half an hour, felt as though he had taken a dose of Opium, though less excited; thinks that he fell asleep without the aid of the drug; dreamed of trying to pass urine into a bottle, but could not do so on account of being constantly in a crowd of men or women,²².—Tightness at the temples (within three hours and a half),⁴.—Flushing of the face (within three hours and a half),⁴.—Had a dejection during the day; towards evening he noticed uneasiness in the bowels (second day); the next day decided diarrhœa set in, and lasted for twelve hours; no griping or distress was induced, except that the abdomen felt as if distended with flatus; he never had diarrhœa, and could see no cause for this attack except from the drug,⁵.—Slight excitement of the circulation (within three hours and a half),⁴.—The same excitement of the circulation as noticed above, besides feeling a slight nervous excitement, such as he has after taking wine (after forty-five minutes),^{4a}.—Vascular excitement, and exhilaration as after taking Morphine; this gradually decreased, and was lost in a fit of drowsiness

(after forty minutes),⁵.—[140.] Pulse 80, before taking the dose; 88 (after fifteen minutes); 80 (after thirty minutes),⁵.—Found himself nodding and then retired (after one hour and a quarter),⁵.—Rash villous and papillated in the flexures of the neck, persistently for several weeks,⁶.—Prickling sensation in the skin (within three hours and a half),⁴.

AMMONIUM CARBONICUM.

21, Buckner's Repert. für Pharm. (Wibmer), Buckner's experiments on himself.

October 20th, a pulse of 76, took 1½ grain. Immediately after a strong odor of Ammonia was noticed in the nose. After twenty minutes the dose was repeated, the pulse remaining the same. Twenty minutes after took 3 grains; taste and odor as before. Half an hour after the last dose took again 3 grains, feels quite well, pulse 70; ate dinner with good appetite. On the next day, pulse 68, in the morning, took 3 grains. After fifteen minutes, noticed a throbbing headache in the left frontal region, lasting two minutes, pulse 72. Twenty minutes afterward took 6 grains. After a quarter of an hour the head was heavy and full, lasting about half an hour. After twenty minutes the pulse was 74. About 10 o'clock I breakfasted with appetite. 1 o'clock, pulse 76, took 6 grains, and repeated the dose after fifteen minutes. In the afternoon I noticed transient slight headache. On the third day, pulse 71, took 6 grains. After five minutes noticed slight dulness and heaviness in the forehead, which lasted ten minutes, and afterwards for five minutes, slight throbbing in the frontal region. Twenty minutes afterwards took again 6 grains. Ten minutes after this dose the head was somewhat heavy. Twenty minutes afterwards took again 6 grains; ten minutes after this I noticed a feeling of distension in the brain, especially in the right side; scraping in the throat provoking a dry cough. Finally, about 10 o'clock, I took 12 grains, followed by increased inclination to cough, and increased secretion of mucus in the trachea. Ate dinner with great appetite, and through the day felt quite well,²¹.

AMMONIUM CAUSTICUM.

Authorities. **15**, E. P. Wilkins, *Lancet*, 1846 (1), p. 385, a woman, æt. twenty-four years, took a quantity of liquid Ammonia; **16**, J. W. Trotter, *Lancet*, 1852 (1), p. 261, P. W., æt. thirty-six years, took 1 ounce hartshorn in milk, afterwards he took copious draughts of warm water; **17**, Dr. Barclay, *Med. Times and Gaz.*, 1853 (2), p. 554, a girl, aged nineteen years, when faint from fright had some hartshorn given her; **18**, H. W. Reed, M.D., *ibid.*, 1855, p. 59, a man, æt. thirty-five years, swallowed at one draught 3 drachms each of strong Ammonia and Ammonia sesquicarb.; **19**, A. Patterson, M.D., *Edinb. Med. Journ.*, vol. iii, 1857-8, p. 236, a man took 1 ounce into his mouth, but probably none of it reached his stomach; **20**, John E. Bean, M.D., *Pacific Med. and Surg. Journ.*, June, 1867, p. 13, Dr. John H. Pike swallowed some "Liq. Ammon. fort.," death after twenty-one hours; (21 to 27 from Tardieu); **21**, Dr. Pellarin, *Union Méd.*, 1857, effects of a large dose; **22**, Prof. Foussagrives, *ibid.*, poisoning by 30 grams; **23**, Dr. Chapplain, *Archives du Méd.*, 1845, p. 84; **24**, *Gaz. Méd. du Santé*, 21 Mai, 1816; **25**, M. Potain, *Union Méd.*, 1862, t. 12, p. 119; **26**,

M. Geneuil; **27**, M. Albert Robin, Journ. de Therap. 1re ann., No. 5, p. 194; **28**, Dr. F. R. Quinton, Lancet, 1876 (1), p. 280, a man, æt. forty-four years, swallowed about 5 or 6 drachms liquor Ammon., death in thirty-two hours; **29**, Dr. W. Dyson, Med. Times and Gaz., 1878 (1), p. 35, a child, æt. twenty months, swallowed a quantity of strong Ammonia, death; **30**. Mr. Gillam, *ibid.* (2), p. 706, T. B., æt. sixty-four years, swallowed half a pint of liquor Ammonia.

Mind.—Mental despondency,¹⁸.—Extreme anguish,²⁶.—Anguish, with suffocation and constriction of the throat,²⁵.—Insensibility,¹⁸.—Comatose,²⁰.

Eye.—Yellowish chemosis of the eyes,²⁵.—Intense yellow discoloration of the conjunctiva,²⁵.—Eyes spasmodically turned up, and eyelids closed,¹⁸.—Pupils dilated,²⁶.—[**170.**] Pupils dilated and eyes inverted,²⁰.—Pupils contracted,²³.

Nose.—Profuse accumulation of serous liquid from the nasal fossæ,²⁴.

Face.—Face pale,²³.—Face pale, eyes haggard, injected, and lids swollen,²¹.—Face flushed,¹⁸ ¹⁹.—Upper part of the face of a violet-red color, lower part blanched,²⁶.—Aspect anxious (in two hours),¹⁹.—Lips and tongue red and denuded,¹⁸.—Lips cyanotic,²⁶.—[**180.**] Lips livid,¹⁸ ¹⁹.

Mouth.—Tongue dry,²⁶.—Mouth open,¹⁸.—Profuse albuminous, viscid, bloody secretion pouring from mouth and nares,¹⁸.—Inside of his upper lip, tongue, roof of mouth, and fauces were white, and other parts excoriated,¹⁶.—Inside of mouth, tongue, and fauces, as far as visible, red, raw, and fiery-looking. When asked where pain was seated, he pointed to pomum Adami, under the left ear (in two hours),¹.—Intense and excruciating burning in the mouth, œsophagus, and stomach,¹⁸.—Salivation profuse,²⁷ ²⁸.—Profuse salivation,²⁸.—Enormous secretion of limpid mucus from the salivary glands and mucous membrane of the pharynx, etc., not less than three liters of liquid a day (wonderfully controlled by Chlorate of potassium),²³.—[**190.**] Loss of speech,¹⁸.

Throat.—Hawking of frothy mucus (in four hours),¹⁹.—Horrible pains in the throat, and especially in the epigastric region,²¹.—Intense burning pain and feeling of suffocation (immediately),¹⁹.—Deglutition painful,²⁰.—Great difficulty in swallowing,¹⁶.—Deglutition impossible,²⁶.

Stomach.—Great thirst,²⁰ ²³.—Ineffectual efforts at vomiting,¹⁸.—Vomiting,²⁶.—[**200.**] Persistent vomiting,²⁵.—Vomited some blood,²⁰.—Vomiting of bloody matter,²³.—He vomited a quantity of matter like soap-suds,¹⁶.—Severe pain in stomach,²⁰.—Horrible pain in the stomach,²⁵.—Severe pain over the epigastric region, increased by pressure (second day),¹⁶.—Epigastrium excessively painful on pressure,²⁵.—He felt as if he were on fire from his stomach to his mouth,¹⁶.

Abdomen.—Excessive pain in the abdomen,²⁴.

Stool.—[**210.**] Involuntary stools,²³ ²⁶.—Voided large quantities of blood per anum,²⁰.—Stools profuse, liquid, red, extremely fetid, evidently consisting of a large amount of disorganized blood,²⁵.

Urinary Organs.—Incontinence of urine,²⁶.—Urine suppressed,²⁴.—(Albuminuria); the urine contained up to two grams of Albumen daily,²⁷.—Urine high-colored and thick, with an abundant heavy lateritious elimination,¹⁸.

Respiratory Organs.—Trachea spasmodically rising and falling,¹⁸.—Edema of the glottis,²³.—Voice very feeble,²⁴ ²⁵.—[**220.**] Voice husky,¹⁶.—Complete loss of voice,²¹.—Sonorous, moist cough, resembling a suffocative catarrh, with tracheal râles,²¹.—Cough and expectoration provoked by anything getting into the throat, so that it was almost im-

possible to get liquid into the œsophagus,²⁵.—Profuse expectoration of mucus,²⁴.—Respiration rapid,²³.—Hoarse croaking respiration,¹⁸.—Respiration stertorous,²¹.—Breathing stertorous, with strong odor of Ammonia,²⁰.—Breathing stridulous (in two hours),¹⁹.—[230.] Gasping for breath,¹⁸.—Suffocation,²⁶.—Insupportable suffocation,^{21 24}.

Chest.—Mucous râles in chest,²⁰.—Intense cutting pain opposite fifth and sixth cervical vertebræ, at the bottom of the pharynx (in twelve hours),¹⁹.

Heart and Pulse.—Tumultuous action of the heart,²⁶.—Carotids beating violently,¹⁸.—Pulse very rapid and feeble,²⁶.—Pulse small, 112,¹⁶.—Pulse 100 (in two hours),¹⁹.—[240.] Pulse small, rapid,^{23 25}.—Pulse small,²¹.—Pulse feeble,²⁰.—Pulse slow, very irregular,²².

Extremities.—Nails violet,²⁷.

Generalities.—As soon as she had drank it, she fell back insensible, apparently (to those with her) as if choked. In four hours she had revived somewhat, but complained of severe burning pain down her throat, in the epigastrium, and left hypochondrium, each of which parts were tender on pressure; pulse 53, small; voice a feeble whisper; great debility; countenance anxious; choking sensation on swallowing; pupils widely dilated; breathing difficult; tongue coated with white fur, painful and tender; two or three patches of its mucous membrane pulled off; three convulsive twitches of the right arm at different times during my visit,¹⁵.—Almost immediately became conscious of severe pain in the stomach. In an hour or two became sick and vomited some blood; hæmatemesis to a greater or less extent continued for three days. In eight weeks she became much emaciated, complained of constant vomiting, with a weak and frequent pulse, a sort of hectic flush on the cheeks, and great prostration. Latterly the vomiting became more constant and severe, her pulse was sensibly feebler, and she became more emaciated from day to day; the eyes sunken, the tongue foul; she complained of headache, and was so weak that she was scarcely able to turn in bed. The bowels were confined throughout. She ultimately died of starvation,¹⁷.—Face pale, anxious, and covered with clammy sweat, extremities cold, pulse 140, and very feeble; mouth and throat very red and inflamed-looking. He complained of burning pain in his throat, with difficulty of swallowing, and a feeling of impending suffocation; his voice was reduced to a whisper, and his breathing noisy, frequent, and laborious; all the voluntary muscles of respiration seemed to be exerted to get air into the chest; occasionally he vomited mucus slightly tinged with blood (after one hour). Quantities of tenacious mucus collected in the throat and induced fits of coughing and sickness (first night),²⁸.—Three white patches on the tongue, and one or two on the inner side of the cheeks; none visible on the tonsils or pharynx, but considerable congestion of the mucous membrane of these parts. Deglutition exceedingly difficult. Frequent occurrence of vomiting; respiration rapid and shallow, accompanied by laryngeal and tracheal râles; free passage of air into the chest; cyanosis slight (after one hour). Signs of interference with the entrance of air into the lungs more marked, but not considerable. Râles distinctly heard all over the back and chest (after eleven hours). Unconscious; eyes half open; pupils moderately contracted and equal. Convulsions came on during the night, and were now frequently recurring (after twenty-three hours),²⁹.—Semiconscious; pupils widely dilated, and his breathing noisy and hurried; pulse very rapid; sweating profusely. He complained of great pain in the abdomen, and vomited a quantity of

blood, mucus, and shreds of mucous membrane (in five hours); hoarse and in a heavy drowsy condition; face dusky and skin dry; temperature 100.8°; pulse 130; again vomited blood and mucus (in ten hours). His lips are much swollen, the tongue very dry, and the mucous membrane of the mouth is partly eroded. The fauces are extremely congested and almost meet in the middle line; the mucous membrane looks oedematous, softened, and inflamed. There is great pain and tenderness of the abdomen on the slightest pressure. Tympanitis is marked. Has twice vomited blood since the night, and complains of burning pain in the throat and at the pit of the stomach. 11 P.M., much worse and is becoming comatose. There is great dyspnoea; respiration about 66 in the minute; pulse 180. Incessant retching till death (second day).³¹—[250.] Beating the bedclothes with his hands (in two hours).¹⁹—Severe tremors.¹⁸—Extreme prostration.²⁵—Severe cramps.¹⁸—Violent muscular pain, especially in the thigh.²⁷

Skin.—Erythematous spots in different parts of the body, especially along the lymphatics; the spots are red, bordered by a yellowish zone.²⁵—Scarlatina-like redness of the lips and mucous membrane of the mouth and tongue, as though the epithelium were peeled off.²³—Several rosaceous spots on the internal and anterior surface of the forearms; these red spots increased in number on the next day, and covered the whole inner surface of the arm, generally following the course of the lymphatics.²⁵

Fever.—General coldness.²⁵—Surface rather cold.¹⁶—[260.] Coldness of the surface and extremities.¹⁸—Cold skin, especially in the extremities.²²—Extremities cold (in two hours).^{19 20}, etc.—Profuse perspiration.¹⁸—Cold sweats.¹⁸

AMMONIUM IODATUM.

Authority. Sidney Ringer, M.B., Practitioner, vol. viii, 1872, p. 129, a lad, æt. seventeen years, convalescent from acute rheumatism, took three doses each of 10 grains.

After two doses, and in six hours and a half, petechial spots broke out on both legs.

AMMONIUM MURIATICUM.

Authority. 12, Dr. C. Browne, Lancet, 1868 (1), p. 720, H. W., æt. twenty-five years, subject to mania, ate a quantity of Ammonium chloride.

Delirious, fancying that enemies were hiding under his bed, and accosting him; that a sword was hanging over his head; and that flames were surrounding his head.¹²—Insensibility as if dead.¹²—Giddiness.¹²—Dazzling before eyes.¹²—Tremulousness of the eyelids.¹²—Singing in ears.¹²—Sickness and pain in bowels.¹²—Sobbing respiration, as of hysteria.¹²—Pulse feeble, 100.¹²—[610.] Extremities of a bluish tinge.¹²—Convulsive paroxysms, which in a few minutes passed off, leaving only firm flexure of the hands and forearms.¹²—Skin cold and moist.¹²

AMMONIUM PHOSPHORICUM.

Authority. C. Voigt, M.D., Med. Examiner (Bost. Med. and Surg. Journ., vol. xxxiv, p. 308), effects of about 3 grains.

In about an hour attacked by a sense of tightness in the præcordia and around the chest; nausea; thirst; a hard, small, frequent pulse; and a

collapsed state of the circulation. These disturbances were followed by a fulness and tension in the head; heaviness in the limbs; and an unsteady tottering gait.

AMPELOPSIS.

Ampelopsis quinquefolia, Michx.

Natural order, Vitaceæ.

Virginia Creeper or American Ivy.

Mr. Bernay, *Pharm. Journ. and Trans.*, vol. vii, 1876, p. 80, two children, æt. two and a half and five years, chewed the leaves, swallowing the juice.

They were quickly seized with violent vomiting and purging, with considerable tenesmus; then collapse, sweating, and faint pulse; followed by deep sleep for two hours, from which they were aroused by a return of the vomiting and purging. Four hours after the commencement of the attack there was still considerable dilatation of the pupil.

AMYGDALÆ AMARÆ OLEUM.

Authorities. **24**, Dr. Van Praag, *Reil's Journ.*, vol. i, p. 588, a woman applied to her hair $\frac{1}{2}$ oz. of an oil containing the oil of bitter almonds; **25**, Mr. Howard Hopley, *Pharm. Journ.*, vol. xvi, 1856-7, p. 291, a man, æt. forty-five years, swallowed about $\frac{1}{2}$ oz. of the oil of bitter almonds, and died after an hour; **26**, Fred. Hetley, *Lancet*, 1845 (2), p. 612, Harriet L., æt. twenty-one years, swallowed two penny's worth of the oil; **27**, C. G. Mitscherlich, *Pharm. Journ.*, vol. ix, 1849, p. 233, effects of large doses of the volatile oil; **28**, Dr. Barclay, *Lancet*, 1866 (1), p. 255, a man, æt. fifty-seven years, swallowed two drachms of the oil, death; **29**, W. B. Shorts, *Brit. Med. Journ.*, 1868 (2), p. 167, poisoning of a child, æt. three years, by the oil; **30**, Dr. Hunt, *Med. Times and Gaz. (New Eng. Med. Gaz.)*, vol. xiii, 1878, p. 135), a boy, æt. three years, ate an unknown number of bitter almonds; **31**, S. Wright, M.D., *Am. Prac.*, vol. xviii, 1878, p. 219, a man took about two drachms of the oil.

[140.] Insensible; eye sallow; pupil contracted; face puffy and flushed; pulse scarcely perceptible; groaning; breathing stertorously,²⁵. — Before she lost consciousness she experienced sudden violent internal coldness, radiating from the head and back over the whole body; this coldness became more and more severe, and was at last associated with ringing and beating in the ears, followed by complete deafness, swimming before the eyes, paralysis of the arms and legs; as these last symptoms appeared she endeavored to rise, but became completely blind, and called for help, and knew no more. This was followed by general collapse and paralysis, extremely slow superficial respiration, and the beating of the heart was scarcely audible,²⁶. — Fell senseless on the pavement, immediately after swallowing it. Some time later, on being found and questioned as to her feelings, she slowly answered, "Indeed, I do feel dreadfully ill;" and passing her hand over a very exsanguine countenance, she leisurely fell back in her chair, and became perfectly insensible. The respirations were noticed to be slow and regular, but the pulse small, thready, and at least 130-140, and the pupils contracted to an aperture of the size of a pin's head. She continued in this state for about three minutes, when the coun-

tenance assumed a pale livid hue, similar to that of an individual with advanced cardiac disease. During the use of the stomach-pump, the bladder and rectum acted involuntarily. On visiting her later she appeared like a person in deep sleep, and on feeling the pulse, which still remained 140, she suddenly roused and looking wildly about her, with a maniacal expression, inquired where she was. She now complained of excessive burning heat in the region of the larynx and pharynx, was hoarse, and talking, she said, distressed her; some pain and sensation of heat in the epigastrium, but no tenderness on pressure. She expressed a feeling of general numbness in arms and legs, without pain in them; but on pinching them she cried out. The arms and hands were mottled with a livid hue and cold. Great disposition to sleep,²⁶.—Diarrhœa: increased secretion of urine; excited the vascular system and the respiratory organs,²⁷.—In forty minutes he was speechless. The smell of the oil was very perceptible in his breath; no pulse could be felt at his wrist; the breathing was hurried; the pupils were dilated; the extremities cold and clammy, and there was a general purple hue on the face and other parts of the body; the tongue was furred; the fauces and uvula congested and œdematous,²⁸.—Pupils dilated and fixed; foaming at the mouth; difficulty of breathing; pulse scarcely perceptible; surface of body very cold; general condition inanimate,²⁹.—Lying apparently unconscious in his mother's arms, slightly cyanotic, and markedly pale, with eyelids closed. On raising the eyelids the pupils were seen to be moderately dilated. The arms were stiffened through tonic spasm of the muscles. The breathing was very low, with no catch in the act of respiration. The pulse could not be felt at the wrist. Slight improvement after vomiting (from emetics and tickling the throat), with speedy relapses towards the comatose state, so that it was not for nearly an hour and a half that all dangerous symptoms had subsided,³⁰.—Almost pulseless, extremities cold, lips black, with face intensely cyanosed, looking like a corpse that had lain for hours in the sun. He gasped for breath like a fish out of water, and his speech was unintelligible. The subjective symptom was intense pain in the head. As he recovered he kept exclaiming in a jerking, hesitating way, "What's—the mat—matter with me?"³¹.

AMYL NITROSUM.

Authorities. **12**, Dr. Kelp, *Deutsche Archiv für Klin. Med.*, 1875, vol. xv, p. 602, effects of inhaling 5 drops on cotton, in a case of melancholia; **13**, Dr. Aug. Ladendorf, *Berliner Klin. Woch.*, No. 43 (*Lond. Med. Rec.*, vol. iii, 1875, p. 18); (14 to 26, C. Wesselhoft, M.D., *New Eng. Med. Gaz.*, vol. xi, p. 388); **14**, C. E. H., M.D., proving by inhalation; **15**, Mr. L. A. P., same; **16**, Mr. W. R. B., inhaled 1st dec. dil. three times at intervals of five minutes; **17**, Miss M. M., proving by inhalation; **18**, Miss A. E. S., same; **19**, Mr. E. B. H., took internally 2d cent. dil., took 1 drop, and after thirty minutes 3 drops, after another thirty minutes 3 drops again, the next day 10 drops, after an hour 20 drops, the next morning 40 drops; **20**, Mr. H. E. R., took 2d cent. at 1.15, 3, and 3.30 P.M., 2 drops at 4 P.M., diluted medicine and took 3 drops at 4.30 P.M., 4 drops at 5 P.M.; **21**, Miss A. W. S., took 1 drop 2d cent. at 1.30 and 3 P.M., 2 drops at 5 and 9 P.M.; **21 a**, same, two days later, took 5 drops at 3 and 7.45 P.M.; **21 b**, same, five days later, took 10 drops; **21 c**, same, effects of inhalation; **22**, Mr. L. A. P., took 3 drops of 2d cent. at 7, 8,

and 10 P.M. (first day), same at 9 A.M. (second day); **23**, L. G. H. R., took 2 drops of 2d cent. in half a spoonful of water, at 1.45 P.M., and at 3.17 P.M.; **24**, Mr. H. P. C., took 1 drop at 3.30 P.M., 3 at 5 P.M., 6 at 7.30 and 9.30 P.M. (first day), 10 at 10 A.M. (second day), 15 at 4 P.M., 20 at 4.30 P.M., 40 at 5.15 P.M. (sixth day); **25**, Miss A. E. S., took 3 drops 2d cent. in about three tablespoonfuls of water, a spoonful at 7, 7.15, and 7.30 A.M., put 12 drops in half a glass of water, and took 2 teaspoonfuls at 2.30, 2.45, and 3 P.M.; **26**, M. M., took 1 drop 2d cent. at 2.35 P.M.; **27**, A. M. Cushing, New Eng. Med. Gaz., vol. xi, p. 408, inhalation of 1st dec. atten.; **28**, Dr. Morrison, Month. Hom. Rev., 1877, p. 302, symptoms caused by evaporation from a two drachm glass-stoppered bottle, which had been shaken in the morning; **29**, N. F. Cooke, Cincin. Med. Advance, 1878, p. 269, effects of two strong inhalations from a vessel containing 4 ozs. of the crude.

Head.—**Vertigo.** Dizziness,^{710a}; (after seventeen hours and a half),²⁵.—[**140.**] Vertigo on rising in the morning (second day),²².—Dizziness and nausea (immediately),¹⁵.—Decided dizziness and heaviness of the head (after thirty-five minutes),²⁶.—Dizziness, with slight nausea, worse when the eyes are closed (after first dose),²².—**General Head.** Great rush of blood to head and face,¹⁷.—Head heavy (in three hours and a half),²⁴.—Dulness in head (after two hours),²³.—Violent exercise during one minute produced a dull headache (thirty-six minutes after 40 drops); later the influence of heat (closet heated by gas) caused the dull pain to extend from temple to occiput, principally *left-sided*; the dull pressing feeling in occiput remained two or three hours,¹⁹.—Headache and nausea on rising in the morning (second day),²².—Pressure (very slight) in head, forehead, and temples especially (twelve minutes after 40 drops); pressure slightly increased (seven minutes later),¹⁹.—[**150.**] Feeling as though a band were drawn tightly about the head (after eight hours and a half),²⁵.—Immediately an intense, crushing pain upon the head, which seemed to gather into a feeling of confusion, that for a moment threatened to make me unconscious. At that moment I became aware of a quick, somewhat sharp throbbing in the head, and an intense glowing of the face, with general perspiration, especially marked in palms of hands, where it was quite visible. There was also a sensation as though the scalp were jerked forward from the occiput towards the forehead, ceasing just before it reached that point; this was repeated a number of times. Was conscious of a dull headache for some time, perhaps three hours,¹⁴.—**Forehead.** Heaviness and pressure outward in forehead and temples (immediately); pain in head increased, accompanied by stupid, drowsy sensation and burning in the stomach, and up to the throat. During and after a walk of a mile, two hours after inhaling the drug, the heaviness and pressure in the head remain; entirely passed off two hours later,¹⁵.—Great heaviness in front part of head; head would fall first to one side, then to other (after first dose),^{21a}.—Severe, dull, heavy pains across the forehead, without marked external heat, in the morning (second day),^{21a}.—Dull feeling in the forehead (after one hour and a half),²³.—Slight headache in the frontal region (after two hours),²⁰.—Slight oppression at the fronto-parietal suture, then proceeding to the frontal bone (sixth day),¹⁴.—**Temples.** Slight pain in right temple (after four hours),²⁰.—Pressure in the temples,¹⁷.—[**160.**] Pressing pain in the temples,¹⁸.—Painful pressure outward in the temples, especially in the left, with dull, heavy aching pain in the occipital region, extending to the nape of the neck (while walking), (first and second days),²².—Slight

throbbing in the temple (twenty-one minutes after 40 drops),¹⁹.—Throbbing in the temples (after two hours),²².—*Vertex and Parietals.* Violent throbbing in top of head and in cerotids; redness and heat in face, head, and neck,²⁷.—Headache on left side, parietal region (after four hours),²⁴.—Suggestion of pain in right side of head (after forty minutes),²⁰.—Pain in right occipital region (in five minutes),²¹.—Pain in occiput, mostly on right side (after three-quarters, and one hour and a half),²³.—Pain in occiput, aggravated by heat of room and by writing; when the forehead was painful, the pain in the occiput was less severe (after two hours and a half),²³.—[170.] Dull pain in occiput (after twenty minutes),²³.—Dull pain in occipital region of narrow extent (after four hours),²⁴.—Boring pain in occiput (after half an hour)²³.

Eye.—Dull, heavy pressure over the eyes, as if a heavy weight were within (after first and fourth doses),²².—Dull pain over the eyes (after eight hours and a half),²⁵.—Slight pain over both eyes (after ten minutes),²³.—Aching pain in the eyes when in the sunlight, with profuse lachrymation, followed by sneezing (second day),²².—Pain back of eyes on looking at near objects (after three hours),²⁰.—Sudden sharp pain under left eye (in five minutes),²¹.—A decided twitching under the outer canthus of left eye (after second dose),²⁴.—*Vision.* [180.] Dimness of sight (sixth day),²⁴.—Everything appears as if trembling, wavering (second day),²².—Slight blurring of letters when reading (thirteen minutes after 3 drops),¹⁹.—He confirms Pick's observation (also made by others) as to objects appearing yellow after inhalation,¹³.

Nose.—Constant desire to sneeze (after three hours and a half),²¹.—Catarrh and dysphagia (sequelæ of a recent attack of diphtheria) entirely relieved during the action of the drug, but returned after its effects had passed off,²².—Slight epistaxis from left nostril (after one hour),¹⁴.—*Numb feeling in nasal bones,*^{16 27}.

Face.—Face flushed,⁷; (after eight days),²⁵.—Face flushed and hot (in five minutes),²¹.—[190.] After a few minutes the face became very red, and the heart's action violent, the pulse rose 30 or 40 beats in a minute; this symptom disappeared in one or two minutes,¹².—Burning sensation in face (after half an hour and two hours),¹³.—Burning of right cheek, extending up into eye, and around to right ear (after forty minutes),²⁶.—Creeping in left cheek (after four hours),²⁴.—In a few minutes a slight creeping sensation in right cheek, below malar bone, which was momentary; ten minutes later, twitching and creeping under left eye, also slight and momentary,²⁴.

Throat.—Sensation in the throat, which produced a desire to cough, similar to that produced by the fumes of a burning match,¹⁴.—Awoke about 5 P.M., with an extremely dry and parched sensation in throat and mouth; arose to rinse my mouth with water, and in doing so, noticed a marked stiffness and dryness of the lips (second day),²⁰.—Feeling of constriction of throat, as though it were closing up; relieved by motion,²⁷.—Feeling of constriction in the throat, and sensation as if growing up,¹⁶.—Left tonsil considerably swollen and inflamed (after two hours),²⁰.

Stomach.—[200.] Loss of appetite (second day),²².—Eruptions (after forty minutes),²⁶.—Nausea (after seventeen hours and a half),¹⁴.—Slight nausea at first, and in ten minutes inclination to vomit,^{16 27}.—Fullness and pressure in stomach, with belching of gas,¹⁵.—Burning in stomach (after two hours),²².—Hot, burning sensation in stomach, with empty erue-

tations (after first and fourth dose),²².—Crampy pains in epigastric region (after two hours),²².

Abdomen.—Slight oppression near the liver (after second day),²⁴.—Gripping pain in umbilical region,¹⁵.—[210.] Crampy pains in umbilical region (second day),²².—Slight distension in the abdomen, with dull pain (after four hours),²⁴.—Slight rumbling in the bowels (after fifteen minutes),²⁵.—Bowels moved with a rumbling, leaving a feeling of emptiness afterward (after half an hour),²⁵.—Slight gripping pain in the bowels (after eight hours and a half),²⁵.—Severe colicky pains in the abdomen, increased when lying down (after first dose),^{21a}.—Contraction of the muscles in the lower part of the abdomen, as though they were all being drawn together over the region of the uterus; the region of the uterus, fallopian tubes, and ovaries felt very hard on pressure (after seventeen hours and a half),²⁵.

Respiratory Organs.—Hacking cough (five minutes after first inhalation, and again three-quarters of an hour after),^{16 27}.—Could hardly breathe for about a minute,¹⁸.—Oppressed, difficult, and rapid breathing; feeling as if a weight were on the sternum, the oppressed breathing remained during and after a walk of a mile, two hours after inhaling the drug; entirely passed off two hours later,¹⁵.—[220.] Feeling of suffocation from palpitation of the heart,¹⁷.

Chest.—Oppression of chest on walking about (after four hours),²⁴.—Sense of oppression in the chest, especially at the lower part of the sternum (second day),²².—Oppression at the end of the sternum on going downstairs (after two hours and a quarter),²¹.—A peculiar sensation in right lung or chest, not exactly a pain, however (soon),²⁰.—Drawing pain in left side between the seventh and ninth ribs, short but frequent (second day),²².—Slight, dull, aching pain in right chest (after one hour and a quarter); pain more severe (after two hours),²⁰.—Sharp pain in region of heart, relieved by eructations, which continued several days,^{16 27}.—Pain in left side in region of heart, extending around to the back (after two hours),²³.—A short contraction at the left of the heart, ill-defined (after second dose),²⁴.

Heart and Pulse.—[230.] Stitching pains in the cardiac region and feeling of constriction,¹⁵.—Very violent palpitation,^{21c}.—After exercise, palpitation of heart more violent than usual after the same amount of exercise,¹⁹.—Beating of pulse distinctly felt in fingers (after one hour and a half),²³.—Pulse accelerated (sixth day),²⁴.—Pulse accelerated, full and hard (second day),²².—Pulse increased about twelve beats in the minute, but I was unable to count it at once, owing to the confusion of the head,¹⁴.—Pulse accelerated by 10 or 12 beats (fifteen minutes after first dose); rose 20 beats, remained so a few minutes, and then *gradually* fell to normal standard (twelve minutes after 40 drops),¹⁹.—Pulse 60 (after three hours),²⁰.—[240.] Pulse accelerated from 60 to 72, hard and full,¹⁵.—Pulse 64, normally 70 (after second dose),²⁴.—Pulse 83 (before taking medicine); 63 (in twenty-five minutes); 73 (after two hours); did not return to usual state for two days,^{21b}.—Pulse 63 (before medicine); 68 (after ten minutes); 65, not regular (after twenty minutes); 68 (after thirty minutes); 63 (after one hour and a half); 70 and irregular (after one hour and three-quarters); 65 (after two hours); 63 and quite full (after two hours and three-quarters),²³.—Pulse not accelerated but irregular in action, almost impossible to count,^{16 27}.

Neck and Back.—Stiffness and pain in right side of neck and right shoulder, extends down right arm to wrist, neuralgic or rheumatic in char-

acter (in five minutes); pains return (after three hours and a half),²¹.—Twinges near the dorsal vertebræ (after four hours),²⁴.—Pain and weakness in lower lumbar region, in the morning (second day),^{21a}.

Extremities.—Trembling of the limbs, with feeling of weakness,¹⁷.—Weakness in the limbs,^{21c}.—[250.] Lameness and soreness of muscles of arms and thighs entirely cured, perhaps by time,²².—Soreness of extensor muscles (after four hours),²⁴.—Uncasy feeling in extremities (after half an hour),²³.

Superior Extremities.—Slight discomfort in right shoulder (after twenty-seven minutes),²⁶.—Lameness of flexor muscles of right arm (after forty-five minutes),²⁶.—Pain and stiffness in right arm, particularly near wrist, much increased by motion; effort of bending the arm or of writing very painful (after one hour and a half),²¹.—Drawing, tensive pains in the wrist and finger joints of left hand,¹⁵.—Pulsations distinctly felt in the tips of the fingers,¹⁵.

Inferior Extremities.—Stiffness in lower limbs (in three hours and a half),²¹.—Rheumatic pains in left leg and knee, followed by soreness in right arm and shoulder; then lameness in right scapula (after four hours),²⁴.—[260.] Sharp pain in the calf of the left leg (after eight hours and a half),²⁵.

Generalities.—Ladendorff and Dr. O. J. B. Wolff investigated the action of Nitrite of amyl on blood by microscopic examination. A drop of freshly drawn blood was placed on a slide under the objective, and a little spill of wood moistened with Amyl nitrite approximated. When the spill was 1.5 to 2 millimeters ($\frac{1}{16}$ th to $\frac{1}{13}$ th inch nearly) distant from the blood-drop, there immediately occurred, independently of the movements of the blood-fluid, a violent agitation of the blood-corpuscles in the neighborhood of the spill; moving rapidly away from it, and returning, rather less quickly, to their old place, in a curved line, and then madly hastening (*sic*) to begin the same game again. Simultaneous experiments with indifferent bodies gave only the ordinary physical movements. The direct contact of the Amyl nitrite is said to have produced solution of corpuscles, with formation of lakelike pigment (color of winter cherry). The vapor first made the corpuscles pale, then dissolved them. Ladendorff did not employ a moist chamber; but he ascribes the whole of the effects of Amyl nitrite to this action on the blood-corpuscles, causing a backward pressure on the pulmonary arterial system first, and then on the systemic, finally inducing venous congestion as a natural consequence.¹³.—Immediately felt a sense of fulness of head and flushing of face, which increased during one minute to positive agony, without pain; a violent palpitation of the heart now began, which shook the whole body; consciousness was still perfect, and there was no feeling of alarm. I now felt myself sinking to the floor, which seemed a voluntary act, for I eased my descent by means of two tables between which I was standing, lowering myself gently until stretched at full length; my last conscious act was the endeavor to hold the head erect lest the surcharged cerebral vessels should become yet fuller. My first act of returning consciousness was to recognize my attendant, who was giving me Chloroform. Not five minutes elapsed between the first inhalation of the *nitrite* and complete restoration, complete save for anesthesia at the second phalanges of the middle and ring fingers of the left hand. This symptom continued about one hour. I was informed that my "face and eyes were a deep, livid red color," and that I "looked horribly,"²⁹.—Entering the room at 10.25 P.M. I noticed the pungent odor of the *nitrite*. The effects

were: An increasing sense of stupefaction, with flushing of the face and scalp. A sudden smarting of the conjunctivæ, with injection of the ocular conjunctivæ, and dimness of vision as if caused by a film. Subacute smartings in præcordial region; then in right renal region; then in right axilla; then at mid-sternum; then in lumbar region; then in lower lobe of right lung, at apex of the heart, and in lower lobe of left lung, with tenderness on pressure. Increasing dyspnœa, with sneezings, nasal catarrh, and sighing respiration. Pulse (sitting) 68, small, feeble. The smartings changed position rapidly, being most persistent in the eyes, bases of the lungs, and spine. After enduring the increasing discomforts for some twenty minutes, respiration became a series of gaspings, whereupon I beat a retreat (first day). On awaking the pains returned with increased intensity, especially in spine, lungs, and conjunctivæ, with shifting pains, caused by movement, on dorsal surface of right hand, on left patella, and from left thumb to axilla; with catarrhal symptoms, and severe fronto-orbital cephalalgia. Many of these symptoms returned, with varying intensities, during the day; at times accompanied by sighing respiration. They were intensified by the odor of being again inhaled. Urine clear, acid; sp. gr. 1014; free from albumen and phosphates; light cloud of an oxalate (probably lime), and distinct traces of sugar. Pulse (sitting) 78 to 84, feeble (second day). During morning a dull aching in cervical region, which gradually moved to suboccipital region, and then passed away. During the evening, smartings in the eyeballs, with injection of the conjunctivæ. Urine clear, acid; sp. gr. 1020; traces of oxalates and sugar in marked quantity (third day). After rising, sneezed violently three times; severe occipito-frontal headache, felt mostly in suboccipital region; smarting of the conjunctivæ and weakness of vision. Urine clear, free, acid; sp. gr. 1016; saccharine. Pulse (sitting) 80; general lassitude (fourth day). Occipito-frontal headache, with achings in right renal region; smartings of conjunctivæ. Urine clear, free, acid; sp. gr. 1020; saccharine (fifth day). Severe occipito-cervical achings, with increased frequency of the renal achings; smartings of conjunctivæ. Urine clear, free, acid; sp. gr. 1020; abundance of sugar. Pulse (sitting) 70, regular (sixth day). Constant occipital headache, and achings across loins. Urine clear, acid; sp. gr. 1018; less sugar (seventh day). Achings remain, with weakness of eyes, and smartings of conjunctivæ. Urine clear, acid; sp. gr. 1016; traces of sugar (ninth day). Slight occipital headache, and smartings of conjunctivæ; returns of loin achings on waking, and on lying down at night. Urine clear, acid; sp. gr. 1018; traces of sugar (twelfth day). Remains of suboccipital and loin achings, increased by fatigue. Urine clear, acid; sp. gr. 1012; mere trace of sugar. Pulse (sitting) 66, regular, feeble (nineteenth day). Weakness of vision persists. Urine clear, acid; sp. gr. 1014; traces of sugar. Pulse (sitting) 68, regular (fortieth day). The achings mentioned were increased by fatigue, and were most marked during the evenings,²⁶—General weakness, with tendency to perspire easily on slight exertion (after nine hours),²⁰—During the day, general lassitude; did not feel like doing anything. This may have been owing to the weather (second day),²⁰—Restless (second day),²⁴—Great restlessness and uneasiness,¹⁵—Stiffness as if from having taken cold (in five minutes),²¹—Trembling sensation all over, and cannot sit still for fear of something dreadful happening,^{16 27}—[270.] Tingling sensation in different parts of the body (after one hour and a quarter),²⁰—All symptoms relieved by exercise out of doors,^{16 27}.

Skin.—He advises the lips, nostrils, etc., to be guarded from direct contact, as vesication is apt to arise if they are not so protected,¹³.

Sleep.—Drowsiness (second day),²².—Very drowsy (after forty minutes),²⁶.—Confused and drowsy (sixth day),²⁴.—Overpowering drowsiness, lasting more than an hour (after first dose),^{21a}.—Sleep restless, full of anxious dreams; frequent waking, with severe pain in temples and in the stomach and bowels (first night),²².

Fever.—Slight chill crept over the back and sides (sixteen minutes after 20 drops),¹⁹.—His observations, embracing more than forty cases, were made partly upon sane persons, and partly on those recovering from different psychoses. The time selected was generally from 3 to 5 P.M., or after 8 P.M. The thermometer was placed in the mouth, between the cheek and the superior maxilla. The general result is, that the temperature always rises after the inhalation. Many circumstances affect the amount of this rise, such as the quantity of vapor inhaled, the surrounding atmosphere, the contraction of bloodvessels, individual peculiarities, etc.; so that two persons with the same initial temperature may show differences of 0.53° Cent. It is interesting that this rise can generally be demonstrated for from one to two hours. A table of thirty-six cases is given; the smallest maximal elevation was 0.1° Cent. (in three cases); the highest maximal rise was 1.88° Cent. (one case); the mean rise was 0.39° Cent. (thirty-six cases). This elevation is very evident in the course of the second minute of inhalation. The purer the preparations inhaled, the more evident the effect. The effect on his pupils was not very uniform. In all cases when simultaneous observations were made, the axillary temperature rose correspondingly,¹³.—[280.] Hands moist, head and body felt warm, especially the abdomen (thirteen minutes after second dose); greater warmth especially in the chest (thirty minutes after second dose); heat was felt in head and along œsophagus to stomach; heat remained over half an hour (five minutes after 10 drops); heat was experienced principally in stomach; skin moist (ten minutes after 20 drops),¹⁹.—Redness and heat of head, face, and neck, with violent throbbing in top of head and carotids,¹⁶.—Heat in face,^{21c}.—Slight heat in face (after twenty minutes),²³.—Heat and redness of face (immediately),¹⁵.—Marked feeling of heat in face, with flushed face (after three-quarters of an hour),²³.—Heat in left ear (after forty-five minutes),²⁶.—Profuse perspiration on hands,^{21c}.—Skin moist, free perspiration during moderate exercise (second day),²².—Though not warm perspiration started freely, cold chills at the same time running down my back,¹⁵.

Conditions.—Aggravation.—(*Morning*) On rising, vertigo; headache; nausea.—(*Heat of room*), Pain in occiput.—(*Lying down*), Gripping in abdomen.—(*Motion*), Pain and stiffness in arm.—(*Writing*), Pain in occiput.

Amelioration.—(*Eruetations*), Pain in region of heart.—(*Motion*), Constriction of throat.

ANACARDIUM.

Authorities. 12, P. Le B. Stickney, M.D., Phil. Med. Exam., vol. vii, 1844, p. 133, J. B., aged sixteen years, was poisoned by rubbing upon the back of the hand the dried juice of the cashew nut; 13, Dr. F. Taylor, Med. Times and Gaz., 1875 (2), p. 519, a boy, aged thirteen years, painted the figure of an anchor on his left arm with the juice of the Indian marking nut; 14, Dr. Yeldham, Month. Hom. Rev., vol. xx, p. 95, A. B., aged

twenty-eight years, let some of the juice of the bean get into an abrasion on his left wrist.

The effects of the poison was first manifested by an excessive inflammation of the affected part (the hands), accompanied with pain and an almost intolerable itching. This was followed by an eruption of small red pimples, which soon suppurated, bearing a close resemblance to the pustular eruption produced by croton oil. In a short time, these pustules discharged a very small quantity of thin pus, coalesced, and became covered with a thin pellicle, filled with serum, giving to the skin the appearance of having been covered with small blisters. The blistering or desquamation of the cuticle was confined to the part upon which the juice had been applied, excepting the lips, which being repeatedly rubbed by the hands, presented a similar appearance, whilst the swelling and pustular eruption extended to the other parts of the body. The penis and scrotum were enormously distended by an oedematous swelling, but the eruption was confined entirely to the scrotum. The urine, which was voided in large quantities, was of a dark-green color, possessed its natural smell, and deposited no sediment. On the first appearance of the swelling, there was some fever and thirst,¹². —In one week his arm became red, and a number of small pimples appeared. In the night his face became swollen and red, and the next day, the abdomen and thighs on which he had rested the arm were red. The left hand, forearm, and the lower half of the upper arm were swollen, and of a bright-red color, resembling that of erysipelas. On the front of the forearm was an abrasion of the skin, shaped somewhat like an anchor, and presenting some black points, which the boy stated were the remains of the material used. Over the rest of the forearm were many vesicles of various sizes and shapes, mixed, especially at the back of the forearm, with minute pustules. The swollen arm did not pit on slight pressure, but the color readily disappeared for the time. On the back of the right hand, and on the front of the wrist, were a few raised spots, surmounted by minute white pustules. The face presented a similar inflammatory condition. The redness and swelling affected both eyes (the left being quite closed); as well as the upper lip, the chin, and back of the right cheek, where there were a few isolated, raised, red spots. The color was sharply defined, and on the chin was a yellow crust resembling that of eczema. On the inner side of each thigh at the upper part was a large, red, less sharply defined patch, with one or two transparent vesicles; and on the lower part of the abdomen were a few spots resembling those on the right hand and wrist. The eruption caused considerable itching,¹³. —[660.] About twelve hours after the wound itched, and he scratched it and increased the irritation. On the afternoon of the next day, vesicles made their appearance around the wound, and higher up the arm towards the elbow. The skin became hot, inflamed, and of a deep-red color; this condition extending upward above the elbow, and occupying the whole of the anterior and under aspects of the limb. At first there was not much itching, but on the second day the itching was considerable, and so much aggravated at night as to prevent him sleeping. On the evening of the third day the scrotum became sore, red, and inflamed, but without vesication; and at the same time the face was attacked, the eyelids and upper part of the right cheek presenting all the appearance of a sharp attack of erysipelas. The skin, he said, felt hot, stiff, and burning. There was also a red patch at the bend of the right arm, and on the right hand. Two days later the arm was more swollen and tense, the redness deeper and

more uniformly diffused; the color disappearing on pressure, and returning the instant the pressure was removed. The vesicles had dried up. The face was somewhat better. The right hand and arm much the same; itching of the scrotum, but no redness. On the eighth day, there was still a little fullness of the left arm, with a faint blush of the skin. Depressed and irritable, disinclined to move, and impatient of the play of his children, which usually afforded him pleasure. He also complained of confusion of the head and memory. If he laid a thing down he forgot where he had placed it and such like. Looked ill and worn and languid, due, doubtless, to some extent, to want of sleep. Every object appeared a long way off, on waking after half an hour's sleep (third day). Loss of appetite and some thirst. The pulse was weak and somewhat accelerated,¹⁴

ANILINUM.

Authorities. **3**, A. L. Carroll, M.D., Phila. Med. Times, April, 1873, p. 419, a woman, aged thirty years, suffering with rheumatic pains in the knees, bandaged them with red flannel; **4**, same, a man wore a glove, the wristband of which was ornamented with a broad stripe of Aniline purple; **5**, M. Laboulbène, Gaz. Hebdom., 1876 (Med. Rec., vol. xi, p. 382), effects on workers; **6**, M. Bergeron, *ibid.*, effects of fumes on workers; **7**, Dr. Murray, Phila. Med. and Surg. Rep., 1877, p. 69, a girl, aged three years and a half, wore a pair of new scarlet stockings for a day; **8**, Henry P. Wenzel, *ibid.*, p. 188, Mrs. W., aged sixty-four years, took a teacupful of acetous solution of Aniline.

Mind.—Hebetude,⁶.

Head.—Vertigo,⁶.—After three months he began to suffer from vertigo,⁵.

Eye.—Eyes irritated,⁵.

Mouth.—After three months, bitter taste in mouth,⁵.

Sexual Organs.—[10.] After two months he began to complain of pains in the penis and scrotum, and these parts became swollen, and have remained so since. One month after these symptoms he began to suffer from loss of sexual power,⁵.

Generalities.—She had intense burning pain at the stomach and in the head, after swallowing it, and she "could not get her breath." She took salt and water, but did not vomit until eight hours afterwards, when violent emesis and purgation set in, and continued until I saw her, when she vomited stringy mucus, mixed with blood; she was almost exhausted. Her extremities were icy cold, and the head cold and clammy; intense pain on pressure over the stomach, which was hard and enlarged; tongue pallid in centre, and very smooth and red at the tips and edges; eyes injected, lower lids puffed; complained of burning pain in the eyes, and said "Oh my head will burst;" hard pulse, 84; temperature 98½°; respiration labored, 44,⁸.—Sometimes epileptiform attacks, tetanic spasms, etc.,⁶.—Weakness,⁶.

Skin.—Marked and permanent amaranthine discoloration of the hands, feet, and hair; this discoloration made its appearance since he began to work near the vats, from which acrid Aniline fumes escaped,⁶.—In the end the workmen fall into a condition of profound anæmia, with discoloration of the skin, lilac tint of the lips, anorexia, gastric disturbances, etc.; but this state of affairs is promptly corrected by the respiration of pure air, or

300* ANTHEMIS NOBILIS—ANTIMONIUM MURIATICUM.

by inhalations of oxygen, and the use of evacuants,⁶.—A vesicular eruption forming a complete bracelet about the wrist,⁴.—Eczematous eruption affecting both knees. There was considerable tumefaction, much redness, and an intolerable itching of the skin; the condition being that of *eczema rubrum*,³.—The next day, the left leg was much swollen, covered with small blisters, and presenting a mottled appearance, much like castile soap. A day or two afterward the right one became similarly affected,⁷.

Sleep.—Somnolence,⁶.

ANTHEMIS NOBILIS.

Authority. 2, J. C. Burnett, M.D., Month. Hom. Rev., 1877, p. 408, a lady, aged twenty-five years, drank the dregs of some tea.

Pain in belly from side to side just above navel, corresponding to the transverse colon, commencing on the right side and going over to the left; then the bowels became relaxed, the stools were at first *white*, then *putty-like*; then pretty severe vomiting with griping, and great ineffectual desire for stool. Feeling of griping, and coldness and chilliness in the inside of abdomen, passing downwards into the legs as far as the knees. Tongue coated white, with islands on it. An intense headache on the top of the head, as from pressure from within, and feeling as if the top of her head were blown off,⁷.

ANTIMONIUM CRUDUM.

Authorities. 25, E. W. Berridge, M.D., North. Am. Journ. of Hom., 1873, p. 502, Mr. —, took 200th; 26, same, New York Journ. of Hom., vol. ii, p. 460, Mr. —, took 1200th (Jen.), three times a day, for several days, for corns; 27, same, Am. Journ. of Hom. Mat. Med., vol. ix, 1876, p. 250, Mrs. —, took a dose of 1200th (Jen.), on two consecutive days for corns.

In the morning ears feel stopped up, and when a note is sung he hears echoes of the note going higher and higher by octaves; after breakfast this passes off,²⁶.—Feels ravenous for one hour and a half before food, but loses appetite when he begins to eat, as if he had had enough,²⁶.—Palpitation both heard and felt when lying on left side. For three days every evening, at 6.30 P.M., pain at apex of heart,²⁵.—On second to fourth day, reckoning from the first, at times involuntary escape of a little urine,²⁷.

ANTIMONIUM MURIATICUM.

Authority. 2, Weeden Cooke, Lancet, 1848 (1), p. 230, W. H., aged forty-one years, swallowed 1 ounce.

Immediately experienced a burning sensation in the mouth and fauces, and very soon became insensible. In one hour, surface of body cold and clammy; eyes lustreless, with inactive pupils; the pulse was so small that it was only perceived by the most delicate fingering, and the expansion of the chest so very slight that respiration appeared indeed to be suspended,².

ANTIMON. ET POTASS. TART.

Authorities. **55**, Dr. Mackintosh, *Lancet*, 1827-8 (2), 536, A. B. took 20 grains in a little sugar; **56**, Usher Parson., *Bost. Med. and Surg. Journ.*, vol. iii, 1830, three servants took over 40 grains each; **57**, Wm. F. Porter, M.D., *Lancet*, 1832 (1), p. 46, effects of a large quantity; **58**, George Lefèvre, M.D., *ibid.*, 1844 (1), p. 444, a lady swallowed 25 grains; **59**, J. T. Gleaves, M.D., *West. Journ. of Med. and Surg.*, 1848, R., *et.* twenty-four years, took a tablespoonful; **60**, John S. Beale, *Lancet*, 1854 (1), p. 68, a girl, *et.* sixteen years, swallowed from 40 to 60 grains, death; **61**, C. Ellis, M.D., *Bost. Med. and Surg. Journ.*, vol. iv., p. 400, fatal poisoning of Miss —, *et.* twenty-one years; **62**, John Gabb, *Med. Times and Gaz.*, 1866 (2), p. 379, a man, *et.* forty-three years took 3 teaspoonfuls; **63**, Alfred Nobiling, *Versuche uber die Wirkungen des Brechweinsteines in kleiner Dose bei längerem Fortgebrauche*, München, 1868; **64**, Sharp's *Essays on Medicine*, 1874, p. 725, took Ant. tart. 1st, 1 drachm; **65**, John Morley, *Brit. Med. Journ.*, 1876, p. 492, a lady, *et.* eighteen years, took over a teaspoonful; **66**, F. Mason, *ibid.*, 1877 (1), p. 674, a man swallowed 80 grains.

Pustular eruptions of the tongue and lining membrane of the mouth, of the character of those produced on the skin by the application of the ointment.⁵⁷—Pulse 72 (before experiment); 70 (after two minutes); 72 (after five minutes); 67 (after ten minutes); 72 (after fifteen minutes); 71 (after twenty minutes); 74 (after twenty-five minutes); 68 (after thirty minutes); quickened by the deep breathing, 70 (after thirty-five minutes); 72 (after forty minutes); 77 (after fifty minutes); 66 (after one, and two hours).⁶⁴—Breathings 18 (before experiment); 20 (after four minutes); 18 (after eight minutes); 14 (after twelve minutes); 13 (after eighteen minutes); 12 (after twenty-four minutes); 10 (after twenty-eight minutes); deep uncomfortable sighings, 8 (after thirty-four minutes); 7 (after thirty-eight minutes); 6 (after forty-two minutes); 12 (after fifty-two minutes); 18, natural (after one hour).⁶¹—Rolling upon the ground in great agony, vomiting blood, and tormented by agonizing colic pains.⁶⁴—In half an hour violent nausea was induced, but vomiting did not commence till 2 P.M. (after three hours), after which it became more violent till three, when it seemed at its height; a quantity of bile was at first ejected, afterwards painful strong retching, with an obtuse fixed pain at the epigastrium, which was not always referred to the same spot, and accompanied by great thirst; a slight discharge of mucus at intervals ensued. About 4 P.M., the above-mentioned symptoms gradually disappeared, and were succeeded by great and universal prostration; two very copious, bilious stools were passed. In the evening, after taking some tea, a profuse perspiration broke out, which appeared to be the last effect of the medicine.⁵⁵—Unable to stand; scarcely able to speak; exhausting evacuations, both from the stomach and bowels; weak, contracted pulse; cold clammy sweat; extreme paleness; prostration of strength.⁶⁴—In about two hours he felt an inclination to evacuate his bowels, and the alvine discharges continued involuntarily. Breathing slow and laborious; face pale and altered, features shrunken; eyes fixed and turned upward, pupils dilated; surface cold; appeared to be unconscious, but stated afterwards that he knew what was passing around him; the action of the heart was intermitting and extremely feeble, and no pulse could be felt at the wrist

(in three hours); complained of great thirst, and a sense of burning in fauces, œsophagus, stomach, and lower bowels (in seven hours); throat sore; fauces covered with pustules, some of which, having discharged their matter, have left soft superficial ulcers (second day),⁵⁹.—[980.] Within a quarter of an hour after vomiting came on, very sharp; and a little while after smart purging. These symptoms continued for about three hours. She also complained of pain down the œsophagus, and described it as "burning her." She then fell asleep. The vomited matter was very dark. Delirious during the six or eight hours previous to her death,⁶⁰.—At 6 P.M. she complained of pain in the lower part of the left side, and retired to her room, where she was immediately attacked with vomiting, followed after several hours by purging, both of which continued, accompanied by burning in the mouth, dryness of the throat, and great thirst,⁶¹.—Lethargic expression of countenance; conjunctiva slightly congested; general surface of body cold and clammy, with a bluish-pale appearance; voice weak; speech slow and deliberate; vomiting and purging; violent cramp in the legs,⁶².—After the experiment of Dr. Mayrhofer (Heller's Archiv, 1846)† I began with the smallest possible dose, 1 mlgm., and gradually increased to 0.013 grm.

September 1st, 1866. I took a solution of 1 ccm., diluted with distilled water to 10 ccm., so that every ccm. contained 1 mlgm. of Tartar emetic. Pulse 73. I took 1 ccm. at 8 A.M., two hours after breakfast. After an hour, not feeling the slightest change in my condition nor in the rate of my pulse, I went about my business. 3.15 P.M., I took 2 ccm.; pulse 71. After about three-quarters of an hour I felt rather uncomfortable for a short time, pulse rose to 72 or 73, and after the disappearance of the discomfort, returned to 71. My appetite at evening was unchanged.

September 2d. 8 A.M., pulse 73, took 3 ccm. After forty-five minutes some discomfort, which disappeared after twelve minutes. Appetite normal. Pulse 71, after twenty minutes.

September 3d. Took at the usual hour 4 ccm. Pulse 72. After forty minutes slight headache, nausea, and very acute sticking pain in the epigastric region, which disappeared after a quarter of an hour. Pulse 74; half an hour afterwards 70; after half an hour's quiet work 68. Appetite at noon diminished. 3 P.M., injected a strong solution into the left thigh, $\frac{1}{2}$ ccm. Pulse 73. After five minutes there was vivid redness, associated with burning pain at the point of injection, which I relieved by cold applications. Pulse 75. Ten minutes afterwards I experienced violent heat, headache, nausea, weakness, which gradually increased, till after ten minutes more sweat broke out. Pulse 79. I was very much exhausted, felt great need of rest. Pulse after fifteen minutes 72. After another quarter of an hour 67. After walking about the room the pulse rose to 73, but soon fell to 68. In the evening I took very little food, and then felt constant burning in the throat, even swallowing caused trouble. Increased thirst, sleep broken.

September 4th. On waking I felt slight headache in the skull, and had little appetite for breakfast. I took a concentrated solution, less than $\frac{1}{2}$ ccm., about 8 mlgm. Pulse 71. After thirty-eight minutes there were the first symptoms of discomfort, which soon disappeared, but ten minutes later returned with increased violence. Very disagreeable sensation in the pit

† Unfortunately inaccessible.—T. F. A.

of the stomach, which was distended. It was very sensitive to touch, not unlike a sticking. Constant recurrence of yawning, eructations, and rumbling in the abdomen, which alternated with each other. I felt a burning heat in the head, with alternations of chill and heat. There was a feeling of coldness in the hands and feet. Pulse 74. After fifteen minutes this condition entirely disappeared and gave place to weakness, weariness, and prostration of the limbs, so that I could scarcely rise from my chair. Pulse 70. Nausea continued the whole day, associated with a very disagreeable taste in the mouth and copious secretion of saliva. I ate scarcely anything all day. The persistent weakness caused me to go to bed earlier than usual.

September 5th. Rose with chill, headache, and weakness of the limbs, otherwise well; took at 8 o'clock 1 ccm. of a solution about 1 cent. grm. of Tartar emetic. Pulse 70. After half an hour there came on nausea, yawning, eructations, rumbling, pain, and pressure in the epigastric region, accelerated respiration (20), headache, burning in the throat, difficult swallowing, accumulation of saliva in the mouth, chilliness, weakness, and retching. Pulse 75. These symptoms gradually diminished, and disappeared entirely within half an hour. Only dulness of the head and weakness remained. Pulse 69. I had a most violent aversion to all kinds of food, and had scarcely eaten the soup at noon, the swallowing of which was very painful, when most violent retching came on, but without vomiting. A disagreeable taste in the mouth obliged me to drink much cold water all day, which afforded some relief to this symptom and to the difficulty in swallowing. Weariness drove me early to bed, and I slept well all night. The next day I was prevented from continuing the proving. I had no remarkable appetite; the epigastric region felt painful; the headache persisted, but only in a slight degree. The difficulty of swallowing was considerably relieved. The proving was also omitted on the seventh.

September 8th. Feeling perfectly well, at 8 A.M. took 1 ccm. Pulse 74. After thirty minutes I felt the first indications of nausea. Pulse 79. With the increasing nausea the pulse rose to 84. Violent retching, chilliness, perspiration, and vomiting of the remains of the breakfast. Pulse 88. With increasing weakness and with diminution of the nausea the pulse fell to 71, and half an hour later to 67. At noon I experienced most intense aversion, becoming qualmish on even looking at food. During the day I suffered from headache and pain in the abdomen, the latter increased in severity by the slightest movement. At night I slept little and very uneasily.

September 9th. I awoke with dull headache and burning in the vertex. At breakfast had little appetite. Pulse 69. I took a solution of 12 mlgm. After thirty-four minutes I experienced first the nausea, the epigastric region became swollen and very painful. Pulse 72. These symptoms disappeared, but returned more violent after five minutes, and were associated with a disagreeable metallic taste, accumulation of water in the mouth, burning in the throat, coldness of the extremities, retching, chilliness, sweat. Pulse 77. In order to relieve the flat taste, I drank cold water. The pulse fell to 72, but soon rose to 79. The symptoms disappeared completely after an hour and a half. Pulse 72. Only the weakness, dulness of the head, and pain in the throat returned. After an hour and a quarter I counted 65 weak beats of the heart. Through the day I had copious secretion of saliva and no appetite. On the following days I was prevented from continuing the experiment, but I was extremely weak and

prostrated. The eyes were surrounded by blue rings, and lay deep in their sockets. The headache left me for only short periods. The difficulty in swallowing had entirely disappeared. Pulse 69 and 70.

September 12th. I made a new experiment; I injected a solution directly into a vein. For this purpose I took a concentrated solution, and injected it into a superficial vein in the left forearm, $\frac{1}{2}$ ccm. of a strong solution, amounting to 5 mlgms. I had scarcely emptied the syringe when I experienced a raging headache, saw sparks of fire, had burning heat in the face, and distressing pressure in the brain; at the same time there was violent *præcordial* anxiety. I suffered from dyspnoea, it became black before the eyes, I reeled, so that I was obliged to sit down; I vomited green masses with great effort. At the same time there was very free hæmorrhage from the place of the injection, which was stopped only by persistent compression. Through the day I felt very weak, as after a terrible illness. Unfortunately it had been impossible to count the pulse, on account of the violence of the symptoms.

September 13th. Headache and pain in the stomach continued; therefore I took only 7 mlgms., after which there was nausea but no vomiting. The pulse rose within thirty-four minutes from 75 to 79, and an hour later fell to 70. Little appetite. On this day slight diarrhœic stool.

September 14th. I injected about $1\frac{1}{4}$ centgm. into the left forearm. Pulse 68. There was immediately violent burning at the point of injection, which became very red. The face became hot; I experienced violent headache in the vertex and pressure in the brain, and a very anxious sensation in the pit of the stomach, nausea, retching, chilliness, and after twenty-five minutes vomiting of green masses, with outbreak of copious perspiration. Pulse 80, very small. The whole day I was very weak and unfit for any effort. On the two following days I could not make any experiments, but the headache continued, there was sensitiveness in the epigastric region, complete loss of appetite, and diminished power of digestion.

September 17th. In the morning I drank $1\frac{1}{4}$ centgm. The condition was tolerable. Pulse 72. After half an hour symptoms previously observed returned. Pulse 83. Headache and weariness lasted through the day. Sleep at night short, restless; diarrhœa.

September 18th. In spite of the unpleasant remembrance of the former injection, I attempted it again, injecting $\frac{3}{4}$ centgm. directly into a vein on the left forearm. Pulse 75. This was followed by frightful headache, heat of the face, vision of sparks, very anxious sensation in the stomach, in short, the same symptoms as after the former injection. On this day I examined my urine with Nitric acid and under the microscope. After the Nitric acid there was slight turbidity, and I found under the microscope desquamated epithelium of the uniferous tubes. This appearance of albumen in the urine warned me, on account of Mayrhofer's proving, that I must discontinue further experiments on myself. The turbidity of the urine lasted two days; the pain in the stomach and head and difficulty in swallowing disappeared after three days, and the appetite returned. But even after two months there were frequently recurring troubles in digestion, reminding me of my proving. It was noteworthy that during the proving I lost seven pounds in weight,⁵³—Immediately experienced a metallic taste in the mouth. In a short time she felt sleepy and powerless; black specks floated before her eyes, and she had to go to bed, where she lay rolling about and became faint, with cold perspirations. At 3 p.m. she vom-

ited her dinner, and was purged, and again vomited two or three times. She had pain in the lower part of the abdomen, with severe cramps in the lower extremities. At 5 P.M. she was in a state of extreme prostration, with tetanic spasms of the legs. With great difficulty the legs were straightened, which gave great relief. She suffered from enteritis for about three weeks, and gradually recovered. The only other effect of the poison was that the hair began to fall out soon after the illness. She is now alive and well, but the hair on the crown of her head is very thin.⁶⁵—Violent vomiting; violent and frequent recurring cramps of the legs, relieved by forcible extension.⁶⁶

APIS.

Authorities. **25**, Edinb. Med. and Surg. Journ., vol. xiii, 1817, p. 130, James G., aged thirty nine, was stung by a bee on the middle finger of the left hand; **26**, Drs. Bell and Ritchie, Am. Journ. of Med. Sci., vol. xix, 1836, p. 266, a man, aged twenty-six years, was stung by a bee on the under side of the tip of the nose; **27**, Dr. Krieg, Caspar's Woch. (Lancet, 1842-3 (2), p. 654), a man, aged sixty years, was stung in the centre of the cornea by a bee; **28**, G. H. Spalsbury, Bost. Med. and Surg. Journ., vol. liii, 1855, p. 285, Mrs. H. was stung by a honey-bee on the left forefinger (she had ulcers in her mouth produced by kreasote); **29**, Dr. N. Nivison, N. Y. Med. Journ., 1857, p. 239, a farmer, aged fifty years, was stung by a bee on the side of the neck, death on the sixth day; **30**, C. Hanbury, Jr., Med. Times and Gaz., 1860, p. 233, Mr. J. was stung behind the ear; **31**, M. Monquin-Tandou, *ibid.*, quotes the case of a man, aged thirty-six years, who was stung on the back of the right hand by three or four bees; **32**, John Ewens, Med. Times and Gaz., 1860 (2), p. 359, a man was stung by a common bee below the right ear; **33**, same, Lancet, 1872 (2), p. 437, an elderly lady was stung; **34**, E. W. South, M.D., Am. Journ. of Hom. Mat. Med., vol. vi, 1873, p. 18, a man, aged thirty-five years, was stung twenty-seven times by bees; **35**, H. King, M.D., Ohio Med. and Surg. Rep., vol. vii, 1873, p. 285, Mr. W. S. aged fifty years, was stung on the back of his hand; **36**, Dr. James Kitchen, Am. Journ. of Hom. Mat. Med., vol. vi, 1873, p. 249, a farmer was stung in nine places by honey-bees; **37**, George Walker, Lancet, 1874 (2), p. 833, the writer was stung on the forearm by a bee; **38**, Bull. de la Soc. Med. de la Suisse Romande, 1874, No. 8 (Hahn. Month., vol. xi, p. 506, 1876), a boy, aged eighteen years, was stung in the middle of the right palm; **39**, E. W. Berridge, Am. Journ. of Hom. Mat. Med., vol. ix, 1876, p. 246, Miss —, was stung by a bee on the forehead; **40**, Dr. Tinker, copied from MSS., Mrs. A., aged forty years, not pregnant, for abdominal enlargement and cessation of menses, took 15 drops tincture, and repeated the dose after three hours.

The conjunctiva was greatly hypertrophied, and the cornea covered with a dense opaque layer of membrane. There was every reason to believe that the internal structures also, fully participated in the diseased process. On closely examining the eye a dark and slightly prominent spot was discovered in the centre of the cornea, around which much vascular injection was perceptible, and from this spot was extracted a long filiform body, the sting. The inflammation soon began to subside, but some striking results became permanent in consequence of the injury. The tint of the iris had changed from its natural grayish blue to a perfect blue, the pupil remained

dilated and immovable on the stimulus of the light, and the patient, who before the accident was obliged to use convex glasses, now required one concave, being nearsighted on the left side,²⁷.—Very soon after, he became faint and began to vomit, which was repeated nine times, his bowels also were relaxed, though he did not mention how many times,³⁶.—Shortly after attacked by sharp crampy pains in the stomach and abdomen, followed presently by severe vomiting and diarrhœa, which lasted at intervals for about two hours, and which simulated closely an attack of cholera morbus,³¹.—Nausea, followed by profuse vomiting (second day); breathing oppressed and sighing (third day); diarrhœa; countenance shrunken, wan, and anxious; pulse reduced in force and volume; tongue covered with a dirty white fur, pale, soft, and flabby (fourth day); sleeplessness; great restlessness and jactitation,²⁹.—Vomiting; slight spasm or convulsion; pulseless and breathless; lips livid; mouth open; eyelids closed, pupils insensible to light; skin cold and clammy. System very much relaxed, urine passed involuntarily. On the skin of the extremities, small purple spots, about three or four lines in diameter, nails on fingers and toes purple, and skin on feet the same,³⁰.—Soon after the sting there was faintness, vomiting, and purging, followed by prolonged fainting and low pulse, with repeated rigors and profuse sweating. On another occasion there was a severe attack of asthma in addition to the other symptoms,²⁵.—He was instantly affected with an indescribable sensation over his whole body, with a prickly feeling, and white and red spots in the palms of his hands, and on his arms and feet. Tears at the same time involuntarily flowed, the nose and face swelled, accompanied with hoarseness, loss of taste, oppression at the pit of the stomach, and difficulty of breathing. On his way home, which was distant about half a mile, he felt a great disposition to sleep, with increased difficulty of respiration, and by the time he reached his house, his face, throat, breast, and limbs were considerably swelled, with an increase of the other symptoms. He was soon seized with chilliness, cold extremities, and nausea,²⁶.—Immediately on receiving the injury, she put her finger to her mouth in order to relieve the pain by suction; in a few moments she felt a prickling sensation in the lips and tongue. This sensation extended rapidly over the face, temples, and head, thence over the entire body; the sensation now resembled the pain in the finger from the sting. A few minutes after the accident happened, there was a good deal of tumefaction of the face, so much so, that the eyes were nearly closed, and the lips and tongue were so much swollen, as to interfere with speech. There was distressing sensation of fulness in the head, the patient declaring that her temples would burst. She complained of oppression at the chest, and inability to take a full inspiration; the skin was intensely red, and covered with an eruption over the entire body, except the feet, resembling urticaria, causing distressing itching and prickling. There had been severe rigors. Pulse 87 and full,²⁸.—Immediately seized with obscuration of vision, loss of strength, profuse perspiration over the whole body, suffusion of the face, acute pain in the head, oppression, anxiety, and fear of death; urticaria, with swelling of the lower extremities, and intense fever,³¹.—[990.] In twenty minutes he began to experience a sensation of itching, almost intolerable, in the ears, first the right, then the left. The right hand then felt benumbed, and this was followed immediately by intense itching of the palm, and the pulse was discovered to be very feeble. Then the skin of the forehead and face felt full and constricted, and began to swell, and red streaks made their appearance on the face. Gradually

the swelling extended to the body and extremities, and the whole surface was covered with an eruption resembling urticaria. At the same time all symptoms of a collapse developed (first day). Feels dull, sleepy, and complains of lassitude, and a rumbling sound in both ears, and a general confusion, also incapability of fixing his attention on a book requiring thought (second day).³²—In a few minutes he was seized with nausea and vertigo, and a general sense of distress and prostration, accompanied with mental anxiety. When seen by me within half an hour, he was lying on his back with flushed and slightly puffed face and ears, and flushed neck, breathing with some difficulty, a sense of fulness and choking as if filling up his throat; oppression over the chest and epigastrium, troublesome itching or stinging of the face, ears, and throat, and also of the hands and wrists, feet and ankles. There was little or no itching on any other part of the body. An examination of his limbs discovered a marked redness of the hands as far as the wrists, and of the feet and ankles, none farther up the limbs. The itching on the limbs seemed to be confined to the backs of the hands and the upper part of the feet. The pulse was quick and full, not hard. An examination of the place where he was stung showed that the bee had struck directly upon a prominent vein on the back of one of the hands. There was no swelling at this point. The precise order of development of all the symptoms could not be accurately ascertained. He suffered in this way about two hours, and then the symptoms gradually disappeared.³⁵—The whole forearm was affected with a cutaneous erysipelas, and there was disorder of the nerves, accompanied with heat, redness, swelling, and pain.³⁷—Immediately after the first pain from the sting he was taken with a very intense itching, which very rapidly extended up his arm and over the entire upper part of the body; ten minutes later in a cold bath, the itching assumed an intolerable intensity; very intense headache, rumbling in the ears, appreciable diminution of hearing, rough and laryngeal voice (perhaps caused by emotion); excitement approaching delirium. The trunk, arms, and the entire surface of the thorax were overspread with a very intense erythematous redness, the body appeared bloated, and the conjunctivæ were injected. Pulse weak and very quick. Washing with ammonia diluted with water gave great relief, but could not be extended to the thorax as the ammoniacal fumes prevented respiration. At a quarter after two, the pains in the head continuing, a mustard bath was administered to the feet, which immediately caused an erythema of the lower extremities, identical with that of the upper part of the body. At 4 o'clock vomiting, which relieved him, and was followed by sleep. At 7 o'clock notable diminution of the eruption on the arms and chest; the head was still free from it, but it was still very prominent on the limbs. Slight headache. He had a very agitated night, and the next day there was a little dulness of the head, and some red spots on the extremities. In the evening the symptoms entirely disappeared.³⁸—White swelling of the forehead and face, so that her friends did not recognize her, with pain in the forehead, and nausea.³⁹—The next morning the second right finger began to swell (except the tip), the middle joint especially, red, hot; burning-stinging pains, with tingling extending up arm to body, and down right side and leg to foot; the pains were worse from sundown (5 P.M.) to 6–8 A.M., preventing sleep; relieved by hot applications and gentle rubbing, or by pinching end of finger, aggravated by cold applications. Constant and persistent aggravation from Apis 30th, 200th, and 1000th. Improving under Ledum.⁴⁰—General malaise; severe attack of nettlerash.⁴¹

APOCYNUM CANNABINUM.

Apocynum cannabinum. John H. Griscom, M.D., Am. Journ. of Med. Sci., vol. xii, 1833, p. 55. General effects.

Its first operation when taken into the stomach is that of producing nausea, if given in sufficient quantity (which need not be large), and if this be increased, vomiting will be the result. It very soon evinces its action upon the peristaltic motions of the primæ viæ, by producing copious feculent and watery discharges, particularly the latter, which action when once excited is very easily continued by the occasional administration of a wineglassful of the decoction. The next operation of this remedy is upon the skin, where it displays its sudorific properties often in a very remarkable manner. Copious perspiration almost invariably follows its exhibition. The activity of its diuretic properties does not appear to be so great in many instances as in others. As a sternutatory also it has a very powerful effect, as I have experienced in my own case; the fumes, on one occasion, produced not only long-continued and violent sneezing, with an increased discharge from the Schneiderian membrane, but were unquestionably the exciting cause of an attack of erysipelas of the face and head.

Proving No. 1.—*Apocynum cannabis.* Essay, submitted to the Faculty of Hom. Med. College of Penna., by Wm. T. Helmuth. 1853. Proving.

The tincture was obtained by digesting the fresh root in alcohol, and afterwards expressing the juice.

Shortly after taking half a teaspoonful of the tincture, a feeling of nausea was experienced, which seemed to commence at the throat, and extend downward to the stomach; this symptom continued for nearly an hour, however there was no inclination to vomit. There was an accumulation of water in the mouth, causing constant expectoration of a thin transparent fluid, after which there was dryness of the fauces. The fancy became exalted, with a flow of good spirits, well pleased with every one; in about an hour this gradually died away, leaving a pain in the forehead, particularly above the superciliary ridges, of a heavy drawing character, together with throbbing of the anterior temporal artery; great drowsiness, with drooping of the eyelids; at times rumbling with darting pain in the lower part of the abdomen. About 12 M. these symptoms had almost disappeared, when another teaspoonful of the tincture was taken, producing the same effects as those noted above, only in an aggravated degree, together with a constant desire to urinate, the urine passing very copiously and freely. On awaking the next morning a severe bruised sensation was experienced in the limbs, all the joints, and particularly in the small of the back, almost impeding motion, which disappeared after walking.

The bladder seemed much distended, and after evacuating the urine, which was very turbid and hot, a thick mucous sediment was thrown to the bottom of the chamber. The urine after being voided left a burning in the urethra, which continued nearly half an hour.

All the next day (Jan. 5th), there was experienced headache, and a discharge of a thin watery fluid from the urethra; the pain in the head was confined to the vertex and forehead, and was throbbing in character; there was also vertigo when rising, but particularly when yawning or stretching; pain at times in the left eye, as though it were wearied, with

drooping of the eyelids. Coldness was sometimes perceptible in the hands and feet. Frequent call to stool, four or five times during the day; the stools were soft and copious, being passed with little pain, with a general feeling of relaxation. Discharge of much urine, with the same sediment as before mentioned, which was found to coagulate by heat, and in very many respects resembled albumen.

The tonsils and throat, for a day or two, seemed coated with mucus which had dried upon them.

Proving No. 2.—Dec. 15th, 10 P.M. 1 drop in a teaspoonful of water. Slept as usual.

Dec. 16th, 9 A.M. One hour after breakfast, dose as before. Immediately after taking a slight burning sensation on the red part of upper lip. Slight nausea, which soon disappeared. Two hours after each meal there was experienced a very distressing oppression at the epigastrium; also a sensation as if there were a working in the stomach. This symptom lasted about two hours, and then disappeared.

Dec. 16th 9 P.M. Two hours after a meal, dose as before. Slept as usual.

Dec. 17th. Morning before breakfast, 2 drops in a tablespoonful of water. The same sensations at the epigastrium as yesterday. Evening, 2 drops, as before. Here it was taken purposely on an empty stomach to ascertain positively if the effects produced would be similar to those previously experienced. About ten minutes after taking it a similar sensation of distress at the epigastrium was experienced, and to such a degree as to compel me to leave my sitting posture and walk about, which gave me some relief. In the evening after taking the drug, about three hours after a meal, not so much inconvenience was produced as when the medicine was taken on an empty stomach.

Dec. 18th. After breakfast, dose as before. Felt better to-day; distress at epigastrium less. 9 P.M., 5 drops in a teaspoonful of water; soon after taking it a sensation of working in the stomach, as from wind, with empty eructations, after which relief was experienced; slight pinching pains in the epigastrium, shooting from right to left. Slept as usual.

Dec. 19th, A.M. and P.M. 5 drops two hours after meals. No marked impressions, save that the epigastric symptoms were about the same.

Dec. 20th. Five drops two hours after breakfast; slight nausea soon after taking the drug, which was of short continuance. Felt less distress at the epigastrium to-day. P.M., 10 drops in a teaspoonful of water, soon after there was a rumbling in the abdomen, and the peculiar sensation of working in the stomach; several short pinching pains across the middle of the abdomen. Sensation, as if a ball were pressed against the inside of the wall of the stomach, at the pyloric region. Slept as usual.

Dec. 21st. No medicine. Felt uncomfortable to-day, on account of above sensations.

Dec. 22d. No medicine. Symptoms beginning to disappear.

Apocynum cannabinum. Edward Chapin. Thesis presented for the gold medal, N. Y. Hom. Med. College, 1878.

Proving of Louis Faust, M.D.—Age twenty-one years. Normal pulse 66. Normal amount of urine passed every twenty-four hours, thirty fluid

ounces. Average specific gravity of the same 1028. Color of hair brown; dark complexion; eyes gray. Habit, strictly temperate.

Commenced the infusion of the tops of the fresh plant July 20th, 1877, at 3 P.M.; took $\frac{1}{2}$ oz. with no effect.

July 21st. At 8.15 A.M., took 1 oz. Soon after slight nausea, which soon passed away. At 11.10 A.M., burning pain in the stomach, causing me to feel uneasy. Shooting pain in right ear, lasting over one hour. (Have never before been troubled with earache.) Urine for the twenty-four hours 40 ozs., and specific gravity 1020. At 4 P.M. took $1\frac{1}{2}$ ozs.

July 22d. Took none. Urine passed during twenty-four hours 36 ozs., specific gravity 1022.

July 23d. At 5 P.M., took 2 ozs. Soon after singing I had partial deafness in left ear, which continued over one hour, with occasional sticking in same ear. Urine for twenty-four hours 24 ozs., specific gravity 1025.

July 24th. Was restless all night; have had temporal headache all day, with heaviness and pain in my eyes, as if I had used them too much, although I have not used them more than usual. At 4.30 took $2\frac{1}{2}$ ozs. Urine, twenty-four hours, 30 ozs.; sp. gr. 1028.

July 25th. Same heaviness over eyes as yesterday. Have had ravenous hunger since commenced proving. Get hungry an hour before meal-time. Bowels have a tendency to be loose. At 7 P.M. took 3 ozs.

July 26th. While at breakfast was taken with violent pain in abdomen, which continued until I had a passage. The stool was very soft, painless; relief after stool, but have felt weak all the morning. Face pale, * with cold perspiration. Rumbling in the abdomen. Urine, twenty-four hours, 42 ozs.; sp. gr. 1024. No medicine.

July 27th. Passed a very restless night. Have an uneasy feeling in my abdomen, but no tendency to stool. Urine, twenty-four hours, 23 ozs.; sp. gr. 1026.

July 28th. Great weakness in my stomach. Although I eat hearty meals I get hungry long before the next. Bowels still loose, they seem to be loose generally in the morning, as I have had no passage in the afternoon since proving. Stools painless. Urine, twenty-four hours, 24 ozs.; sp. gr. 1028.

July 29th. Same uneasiness in stomach. Urine, twenty-four hours, 34 ozs.; sp. gr. 1022.

July 30th. The uneasiness and weakness in stomach have increased to a gnawing this P.M.; it commenced about an hour after dinner. I feel as though I was constantly being threatened with an attack of cholera morbus. (I am very careful in my diet.) Urine, twenty-four hours, 24 ozs.; sp. gr. 1028.

July 31st. Bowels are natural, but the same sensation of gnawing and hunger continues in stomach. Urine, twenty-four hours, 24 ozs.; sp. gr. 1028.

August 1st. Although I ate a hearty breakfast I have now (10 A.M.) that gnawing in my stomach. Urine, twenty-four hours, 34 ozs.; sp. gr. 1020.

August 2d. Feel well to-day. The gnawing and hunger have left me. Bowels are natural. At 5 P.M. took $2\frac{1}{2}$ ozs. Immediately after nausea, which soon passed away.

Had peculiar sensation in thorax, causing me to sigh constantly.

Proving of Byron E. Mead, med. student, age twenty-four.—Weight

148 lbs. Height 5 ft. 5 in. Sanguineous temperament. Hair black. Complexion fair. Eyes black. Temperate in habit. Pulse full and strong, average about 73 beats per minute. At the time I began this proving, was in a good state of health. Bowels regular, one passage per day, stool of ordinary size; for urinary record see tables at the end.

Preparation, cold infusion of the fresh root.

June 19th, 1877. At 10 P.M. took $\frac{1}{2}$ oz. Retired at 11 P.M., having felt no effect from dose. Slept well during the night, and on waking in the morning felt rested and refreshed, and ready for my morning meal.

June 20th. At 7.30 A.M. took 1 oz. upon going to breakfast. No effect. At 8.30 took 1 oz. About one hour after taking last dose felt sick, with an inclination to vomit; also frontal headache, pains darting, passing from one temple to the other; first, from left to right, and *vice versa*. At times feel dizzy, sensation as if I was going to tumble over. *Vertigo coming quickly*, and passing away as suddenly. This last-named symptom is a very marked one in my case, as I am never subject to vertigo unless it can be traced to some definite cause. I also feel dull and unable to think well. Cannot fix my thoughts on any one subject, and retain them for any length of time. At 11 A.M. took 1 oz. Symptoms same as before, excepting the nausea, which was more marked, and remained longer.

Hot infusion of the root. (Had no more of the cold.)

June 20th. At 1.30 P.M. took 2 ozs. of hot infusion of root, and at 2.20 P.M. was taken suddenly with *intense tenesmus*, and the desire for stool so great that I was compelled to leave the drug-room and get to the water-closet as soon as possible. Stools large and light yellow, accompanied by rumbling in the bowels, and flatus. There seems to be almost complete loss of power of the sphincter muscles of anus. After stool, considerable nausea and frequent desire to vomit, but did not. At 5 P.M. passed another large stool, accompanied by great rumbling in bowels, and flatus. Also frontal headache, with sharp, darting pains. Pain in right shoulderblade. General muscular weakness. Feeling of lassitude. At 6 P.M. took 2 ozs. After taking the dose went to dinner, and while there was taken short, and passed an *exceedingly large* stool (in water-closet) light yellow, fetid, with great flatus and the same rumbling of the bowels. Same frontal headache, and constant flashes of heat; face looks flushed and hot. Respiration affected, slight suffocating feeling. Hungry all the time, could eat every hour in the day, relish all kinds of food, and seem to digest them well. Rheumatic pains in the joints. Increased action of the *heart*, fluttering at times, and sensation as if it would force its way out through walls of chest.

June 21st, 7 A.M. Have passed a good night, slept well, and feel refreshed, and ready to take my regular morning meal. At 10.30 A.M. took 2 ozs. About an hour after had a sudden desire for stool, and passed a large one of same color as before, and accompanied by same rumbling and flatus. Impossible to tell when I am through passing, for I get up from water-closet and think that I am through, and another pain takes me, compelling me to hurry and sit down again, and nothing passes but wind. No headache to-day, but considerable vertigo, feel as if I were going to tumble over. Pain in orbital region, and dull heavy feeling over the eyes. General lassitude. No ambition. Cannot concentrate my thoughts. Burning sensation in anus. Complete loss of power of sphincter muscles. At 1.30 P.M. took 2 ozs. About one half hour after had an urgent desire for stool, preceded by intense pain in bowels. Passed a large *marshy* stool, and lots

of flatus. Sphincters seem to be relaxed, and cease to perform their proper function. Urine burns when passing, and feels hot. Head dull, heavy feeling in forehead and heaviness over the eyes. Slight vertigo. Some pain in right shoulderblade, and in muscles of forearm. Cannot concentrate my thoughts. At 4.30 P.M. desire for stool, but in trying passed nothing but flatus. Slight dull pain in region of kidney. Slight palpitation of the heart. At 6.30 P.M. feel too tired to go to dinner, but am exceedingly hungry, and will go. Ate a hearty meal, and when I got through my hunger seemed unsatisfied. On returning, desire for stool, accompanied by flatus and rumbling; passed a large mushy stool, which was light yellow. Soreness and bearing down in rectum.

June 22d. Feel exceedingly weak this morning, limbs and muscles feel sore; slept well last night, but do not feel rested. Appetite good. Had one passage this A.M. on getting up, and of the same nature as before. Burning in the anus. *Bearing-down sensation*, inclination to hæmorrhoids.

6 P.M. Have not taken any medicine to-day. Have had four passages since morning, and feel weak and tired. Pain in joints nearly all day, also frontal headache.

June 25th. For the few days past my bowels have been very loose, having from three to four passages per day, and nearly every one accompanied by flatus. Appetite good all of the time and no unpleasant effects after eating.

At 10.30 A.M. took 2 ounces cold infusion of tops. About an hour after felt sick at stomach, and desire to vomit. Frontal headache and vertigo. 1.30 P.M. Have just returned from lunch and feel urgent desire for stool, accompanied as before by rumbling in bowels and flatus. Stool large, thin, and watery, bearing-down pain in anus, and soreness in rectum. General muscular weakness and inability for labor. Some frontal headache and very marked vertigo. 3 P.M. Desire for stool so intense that I had to run from the drug-room to avoid an involuntary evacuation; passed a large, thin yellow stool and a great deal of flatus. Soreness in rectum and bearing-down sensation. Strong inclination to vomit, but have not as yet. Pain in right shoulderblade and in muscles of forearm. Heaviness over eyes and general lassitude. At 6 P.M. Have just had another stool, but very small, and no rumbling in bowels. Sphincters still relaxed. Frontal headache and heaviness over the eyes. Increased heart's action and flushes of heat to the face.

June 26th. Slept exceedingly well last night, and feel rested this morning.

General Remarks. — Have noticed that my bowels were loose for some two or three weeks after taking the drug, and I had two or three passages per day during that time. I have also noticed a bearing-down pain in rectum and strong inclination to hæmorrhoids. The relaxed condition of the sphincter muscles lasted for some three weeks. The effect on the system was so great that for months after the mere smelling of the drug would make me feel sick at the stomach.

Proving of J. Clark, M.D. — Age thirty-four. Height 5 feet 9 $\frac{3}{4}$ inches. Weight 155 pounds. Color of hair brown, of eyes hazel. Habit temperate. General health good. Complexion dark and of a bilious temperament.

Used θ of the whole fresh plant.

August 23d, 1877. At 6 P.M. began with 3j doses every two hours; was called to an obstetric case and did not get second dose until 9.15 P.M., and then at 11.15 P.M.

August 24th. Took dose at 8 A.M., felt a slight burning sensation in stomach while at breakfast. Took it every two hours all day excepting at 2 o'clock. To-night have nausea almost to vomiting, and slight headache. Have an unpleasant grumbling in bowels, but not much pain with diarrhoea.

August 25th. Both this and yesterday morning had some vertigo on rising from stooping posture. Had furious diarrhoea last night, painless. I did not want to leave the water-closet when I was through, more from a sense of weakness than otherwise. Began this morning at 8 o'clock to take medicine. Don't feel very well this A.M. Abdomen feels as though I had drank large quantities of water.

Evening of the 25th. Have not felt well all day, sick at stomach again to-night. Had hiccough both last night and this morning. Have felt very tired and weary all day. Nausea worse at night about 7 or 7.30. Had a severe pain when walking, in lower part of left lumbar region. Did not take drug very regular to-day, I was too sick. Had three passages through the day but none last night.

August 26th. Commenced again to take medicine at 4 P.M. Have taken three doses and feel very sick. Want to vomit but can't.

August 27th. Stools thin, light lemon-yellow, mixed with mucus, large in quantity. Don't dare to pass wind or water for fear that feces will pass; twice thought that I would allow wind to pass when a small quantity of feces passed. *I lost confidence*, and so quit. Have been very sick all day, so much so, that I have not taken any medicine since 12 o'clock, noon. Have been covered with slight perspiration. Stools this evening as well as during morning frothy, rather more watery, light yellow as above. Have felt weak and exhausted throughout.

August 28th. Was not called up to water-closet last night. This morning mouth dry, tongue sticking to roof of mouth. Still have a little nausea. Vertigo on rising from stooping position. Although twenty hours have passed since I took last dose, still when I thought I would allow a little wind to pass, feces came instead. Stools still quite watery. One symptom I have noticed *several* times, viz., when urinating I hardly know when through, the urine still seems to want to pass, or dribble away. My bowels were not back to their natural condition for sixty hours or two and a half days.

Proving by Alfred Wanstall, M.D.—Age twenty-five. Weight 163 pounds. Height 5 feet 8½ inches. Pulse during health 54 to 60 beats per minute, at times intermitting. I kept no record of my pulse during the proving, as it is very variable, sometimes as low as 50 beats per minute, and I suffer with some heart symptoms, produced I believe by smoking. General health good, bowels regular. Color of hair brown. Eyes dark blue. Complexion dark. I am not easily influenced by medicine.

June 19th, 1877. At 9 P.M. took ½ ounce cold infusion of root. At 11 P.M. took 1 ounce of same.

June 20th. At 7.45 A.M., 1 ounce of same. Increased appetite, even hunger. Smarting and burning in urethra while urinating. At 8.30 A.M. took 1 ounce of same. One hour later feeling of fullness in forehead and vertigo, passed away in a few seconds. Passage from bowels this morning not as copious as usual, and more difficult of expulsion. (I am always regular in this respect.) At 10.30 A.M., took 1 ounce of same. Dull frontal headache through the day. At 2 P.M., prickling and tingling in and

lameness of the muscles of left scapular region, which lasted only a short time. Through the day marked feeling of general muscular weakness. At 5 P.M., small and mushy stool, preceded by much (not offensive) flatus.

At 5.15 P.M., took 2 ounces *hot infusion* of root (fresh). Since taking the last have dull heavy pain in both sides of the face and nose, passing into the forehead, marked on the left side. 7.15 P.M., urgent desire for stool, passage very soft, not fluid, brown in color, not offensive, no pain. Great muscular weakness all the evening. 9 P.M., took 2 ounces of same. 10.45 P.M., took 2 ounces of same. 11 P.M., small diarrhoeic passages, difficult of expulsion, accompanied with much flatus. Passage of much odorless flatus during evening. At 6 P.M., great itching of back, sides, and limbs; on going to bed found that my body was covered with large papules, same color as skin, red only when scratched, which does not relieve. (They are similar to hives.) They appeared in greatest number on the lumbar region and around waist. Sleep much disturbed by dreams (not unpleasant).

June 21st. Hurried out of bed at 5 A.M., in order to have a small loose passage from bowels, repeated at least every twenty minutes until 8 A.M. Passages very small and loose, but not watery, accompanied with much flatus. At times expelled with difficulty, again with much force. Inability to tell whether I am about to pass flatus or feces. Increased appetite. The eruption on body still present this morning, but less prominent and not itching. All the morning dull, heavy, sick feeling in stomach and abdomen. 12 M. Small **watery** stool with much flatus, followed by much soreness of anus. 2 P.M. Small watery passage with much flatus. To-night feeling of great weakness and prostration, especially in all the muscles. Eruption itching again, but not as bad as previous night. 6 P.M. Pulsating in right hypochondrium, lasting several minutes; returned a number of times during the evening. Slept well.

June 22d. Feel well in every way; two passages from bowels to-day, small and natural.

June 25th. At 11 A.M., took 4 ounces of cold infusion of the tops, followed by great nausea, so that I had to lie down. 12.30 M. Vomited the medicine and contents of stomach. No further trouble. From the time I stopped taking the medicine until the first week in August, had two natural passages from the bowels each day; something unusual, as my habit in this respect previous to taking the medicine had always been one passage a day. In addition, I have suffered constantly with sensation of weight and pressure in the anus, so that after sitting fifteen or twenty minutes, I would feel as if the rectum protruded, and I would be obliged to get up and walk about. This condition continued until the first week in August, when I was attacked with protruding inflamed hemorrhoids, which were so severe as to compel me to take my bed; my sufferings were very great for about forty-eight hours; no bleeding at any time, and the pain was as if a wedge were being forced into the anus by blows from a hammer. The inflamed condition of the hemorrhoids lasted three or four days, after which the tumor gradually disappeared, though I was compelled to wear a T bandage for more than two weeks, since which time I have enjoyed my usual good health, bowels moving once a day as formerly. The weight and pressure have entirely disappeared from anus. For urine, see tables at the end.

Proving of Edward Chapin, Medical Student.—Age, twenty-nine years.

Weight at this time, 150 pounds. Height, 5 feet 9 inches. Color of hair, brown; of eyes, gray. Dark complexion. Temperate in habit. Pulse soft and regular. Average heat about 75 per minute. Bowels move regularly each day. Stools of ordinary size, and inclined to be darkish. Urine, the average quantity passed every twenty-four hours for fourteen days during the months of June and July, was 29 fluid ounces. Average specific gravity for same time, 1025 $\frac{5}{7}$. Color and odor normal. Reaction acid. Average amount of urea passed per day, for seven days, was 370.9 grains. I was in a good state of health when I commenced to prove the drug.

August 13th, 1877. Just before retiring took 50 gtt. of θ of roots. Felt considerable nausea when waking during the night.

August 14th. Took 60 gtt. of the same in the morning about 7.30 A.M. About twenty minutes after nausea; this continued, and was aggravated after moving of the bowels. Immediately after the passage of bowels I felt as though everything in me had passed out. My whole abdomen felt empty. Sensation as if something was passing up colon, accompanied with a grumbling feeling, also felt as if something was passing through the liver. In the mean time the nausea was increased and I felt deathly sick; this was associated with flushes of heat in different parts of the body. *Very marked piercing* pains in right temple, followed by vertigo. At 2.30 P.M. took 75 gtt. of same, after which some nausea; and at 4 P.M. took 90 gtt. of same; then nausea, accompanied with similar head symptoms as those in the morning. At 8.45 P.M. took 100 gtt. of same.

August 15th. On rising felt a desire to evacuate bowels, preceded by much flatus. Went to water-closet and had passage (uncommon for me at such an early hour). The stool was mushy, and was expelled with a rush and much flatus. After stool, feeling of much goneness through whole abdomen, and for quite awhile after passage pain in right temple, accompanied with vertigo, also ringing in right ear. An aching sensation in umbilical region. At 7.45 A.M. took 120 gtt. of same. Head symptoms continue, and at 8.45 A.M. had another passage from bowels, this also was expelled with force but no pain. Stool was profuse, mushy but thin, yellowish hue. Same sensation of goneness following stool, associated with the grumbling pain in umbilical region. Also the pain in right temple. The sphincter ani muscle feels relaxed. Headache now more general, the pain extending all through head, even to the orbits. The ache in the head is dull, confused, and the whole system feels much prostrated. At 5 P.M., took 200 gtt. of same, and at 10 P.M. took 3ij of same; felt some nausea before going to sleep.

August 16th. Awoke before 5 A.M. with a severe headache; had to get up and urinate. Bowels moved about 7 A.M. A very copious mushy stool, darkish brown, very fetid. Tenesmus very marked after stool, accompanied with aching pain in hypogastric region. Sensation of goneness, and feel as if thoroughly cleaned out. Dull heavy feeling in head immediately after stool. At 7.45 A.M., took 3iv of same. Severe sticking and piercing pain in right temple, soon followed by dull feeling in whole head. Great prostration, aggravated by motion. Pulse at this time 88. Flushes of heat in different parts of body. At 11 A.M., urgent desire for stool, which was expelled with force and much flatus; it was thinner than the preceding stools. At 6 P.M., the desire for stool was so urgent that I had to make great haste. The stool passed with the force and sound of a cork flying out when opening a bottle of champagne. The stool was thin and lemon-

colored; I also noticed some undigested particles of food. The stools appeared frothy, owing to the great force with which they were expelled. The sensation of goneness and prostration accompanied each passage, also the head symptoms, especially the piercing pain in right temple. About 8 p.m., had another characteristic stool. When urinating could hardly tell when urine was passing. There seemed to be a weakness of the sphincter of the neck of the bladder. The urine at times would feel hot, and leave a tingling sensation in urethra.

August 17th. Had a very large stool, very thin and yellowish, and the last part contained undigested food. The sphincter ani muscles feel greatly relaxed. Anus feels open after passage of stool. The head symptoms and the feeling of goneness and prostration all very prominent. Had another stool in the evening, it was very large or copious, at first very thin, but towards the end it was mixed with feces in small lumps.

August 18th. Had a very copious stool in the morning. It seems as though the gate was wide open, and everything in me had passed out. Stool was very thin and brownish. About an hour after had another stool of the same character. The pain in right temple after this stool was very prominent, also the great prostration of whole system. Some grumbling and disagreeable feeling in bowels. Inclination as if stool would frequently pass. These stools are expelled with force.

Second test with θ of the fresh roots.—August 29th, 1877. Took $\frac{1}{2}$ ounce just before retiring. Slept very well.

August 30th. Took $\frac{1}{2}$ ounce of same about 7.15 A.M. Bowels moved at regular time; first part of stool natural and latter thin. Had some tenesmus after stool. Weak feeling in abdomen and some rumbling. Passed much flatus. Flashes of heat followed by quite profuse perspiration. Spitte quite thick and tenacious. Expectorate considerable amount of white gelatinous mucus. Pulse 68. At 1.40 p.m. took $\frac{1}{2}$ ounce of same. An aching pain in sacrum, and at times sharp and sticking, appearing occasionally in hip, knee, and ankle joints. Darting pains in different parts of bowels; feels as if wind or flatus was expanding the intestines. Pain in right temple, followed by confused and dull aching pain in head. Vertigo at times, and aggravated by ascending. Rumbling in bowels.

At 5.15 p.m. took $\frac{1}{2}$ ounce of same. Soon after eating the lower part of abdomen felt distended. Perspiration quite profuse. After urinating felt a dull pain in neck of bladder, also in urethra; the pain in neck of bladder gave the sensation that the sphincters were trying to close but could not, thus showing an inactivity of these muscles. Had attacks of much nausea, making me feel deathly sick. Could not vomit. Much vertigo.

August 31st. Had quite a severe headache when waking. Restless during the night. At 7.50 A.M. took $\frac{1}{2}$ ounce of same. A very large stool about 9 A.M., thin and brownish. Some flatus. No pain. Sphincter ani feels relaxed and there is loss of power. Aching pain in umbilical region after stool, also a feeling of great goneness, accompanied by pain, first in right temple, then extending through whole head, making it feel much confused. Vertigo. Pain again in knee joints, especially left. At 6 p.m. took $\frac{1}{2}$ ounce. Some nausea. Head symptoms continue as before, followed by spells of marked vertigo.

September 1st. Stool in morning large and of a brownish hue, thin and watery. Feeling of goneness and grumbling aching pain in umbilical

APOCYNUM CANNABINUM. DR. CHAPIN'S PULSE.



Nos. 1 and 2.—Dr. Chapin, in health, two tracings.

No. 3.—September 16th.

Nos. 4 and 5.—September 28th.



Nos. 6-9.—Four successive tracings, September 29th, at 6 P.M.



Nos. 10 and 11.—September 30th, 6 P.M.

region after stool. Urine expelled with little force, as if muscles were relaxed and had lost power of action. Pain in joints at times quite severe, also pain in left scapula at inferior angle.

I stopped taking drug September 1st, and did not commence to prove again until September 28th, 1877.

Test with hot infusion of fresh roots containing 10 per cent. of alcohol.—September 28th, 1877. Weight at this time 146 pounds. Respiration 17. Just before retiring, took $\frac{1}{2}$ ounce of the above-named. Soon after much nausea, but no vomiting.

September 29th. Respiration 16. Pulse 68, and regular in morning: At 7 A.M., took $\frac{1}{2}$ ounce of same. Nausea returned. A rumbling and weak feeling in lower bowel. Headache commenced in right temple, then sharp stabbing pains, followed by confused feeling in head, and then vertigo. Aching pain also extends to meatus auditorius externus. Urine slightly acid. Stool easily evacuated and mushy at end of passage. Heaviness of rectum followed by tenesmus after stool. At 10.30, took $\frac{1}{2}$ ounce of same. Feeling of goneness. Severe pain in head. Arms, apparently loss of muscular power, feel as though they could not be moved. Pains in joints reappear. At 2 P.M. took $\frac{1}{2}$ ounce of same. About twenty minutes after the pulse 60. Dr. Boynton, Assistant Surgeon to New York Ophthalmic Hospital, thus describes the pulse: Full, irregular, slow, intermittent, di-crotic, three regular beats, then intermission, then two beats; then one; intermission, then one; intermission, then can count four beats; irregular; at times feeble, readily compressed; then slow. A short time after, Dr. Wanstall, Resident Surgeon of same hospital, listened to chest and found that the heart was beating regularly for a short time, then fluttering occasionally and very feeble, and then it seemed to be slow and labored, now and then losing a beat; he also noticed a clicking sound, for which he could not account. During the afternoon and evening, felt slight darting pains in region of heart. A feeling of prostration or weakness near the heart. I would have to take a deep inspiration in order to get breath, for I felt so suffocated. After these sensations, flashes of heat followed by perspiration. Had stool, with much tenesmus. Heavy bearing-down feeling in rectum. At 5.20 P.M. pulse for first half of minute 18 beats, and last half 32, making a total of 50 per minute. Respiration 18. Pulse at 6 P.M. 66; had tracing taken at this time. The tracing showed marked intermissions. I had the pulse watched closely and it continued to intermit that day and night. The action of the drug on the heart was so violent that I was fearful of taking any more of it at this time. I did not know but paralysis of the heart would follow, as the pulse was reduced so much below its normal condition. Sleep this night not impaired. Symptoms aggravated by motion.

September 30th. On rising, the pulse at 60. Respiration 17. The pulse was now more full and regular than the previous day. Stool not normal but soft and mushy, and of a lemon color. Much flatus. Prostration after stool not as marked as when I first took drug several weeks before. Pain in region of heart returned, accompanied with feeling of weakness in that region. Sensation as if heart beat slowly, then fluttered, and followed by regular beats. At times could distinctly feel impulse of heart against walls of chest. Sharp pain at intervals in inferior angle of scapula of left side. Head symptoms continue, but not as much vertigo. More or less aching in joints. Whole system feels weak.

APOCYNUM CANNABINUM.

TABLES OF URINARY ANALYSES.

BYRON E. MEAD.

NORMAL.			UNDER INFLUENCE OF DRUG.			
Amt. oz.	Sp. gr.	Urea, grs.	Date.	Amt. oz.	Sp. gr.	Urea.
25	1022	310.75	June 20	31	1030	137.56
28	1026	348.04	June 21	29	1029	218.66
23	1026	244.95	.....	.....	.....	.....
23	1026	328.60	.....	.....	.....	.....
28	1028	372.68	.....	.....	.....	.....
26	1028	300.04	.....	.....	.....	.....
27	1026	383.40	.....	.....	.....	.....
32	1026	454.40	.....	.....	.....	.....

ALFRED WANSTALL, M.D.

NORMAL.			UNDER INFLUENCE OF DRUG.			
Amt. oz.	Sp. gr.	Urea, grs.	Date.	Amt. oz.	Sp. gr.	Urea, grs.
38	1026	370.98	June 20	24	1028	170.46
32	1029	241.28	June 21	26	1030	346.13
34	1026	452.63	June 22	30	1030	346.13
41	1027	564.00	.....	.....	.....	.....
23	1027	336.93	.....	.....	.....	.....
32	1028	454.40	.....	.....	.....	.....

EDWARD CHAPIN.

NORMAL.			
Date.	Amt. oz.	Sp. gr.	Urea, grs.
June 14	26	1025	419.29
July 17	30	1025	355.69
" 18	29	1026	386.06
" 19	28	1027	385.28
" 20	38	1025	354.11
" 21	28	1025	360.40
" 23	28	1023	335.48

WHEN TAKING TINCTURE OF FRESH ROOTS.							
FIRST TEST.				SECOND TEST OF SAME.			
Date.	Amt. oz.	Sp. gr.	Urea, grs.	Date.	Amt. oz.	Sp. gr.	Urea, grs.
August 14	30	1023	386.10	August 30	20	1027	350.00
" 15	32	1024	425.92	" 31	23	1025	387.78
" 16	35	1021	419.30	Sept. 1	23	1027	326.00
" 17	24	1024	317.04				
" 18	23	1025	316.48				
" 19	23	1025	245.00				
" ...							

UNDER INFLUENCE OF INFUSION OF FRESH ROOT PREPARED WITH TEN PER CENT. OF ALCOHOL.						
Date.	Amt. oz.	Sp. gr.	Urea.	Uric acid, Grams.	P ₂ O ₅ , Grams.	SO ₃ , Grams.
Sept. 29.....	31	1023	543.15	.08160	1.9417	1.98132
" 30.....	27	1025	479.25	.05468	1.9024	1.41400
Oct. 1.....	28	1021	459.73	.16170	1.8823	1.46235
" 2.....	26	1024	334.62	.28798	2.0234	1.25857

The increase of P₂O₅ on the 2d is owing possibly to the eating of oat-meal on the forenoon of Sunday, also on the following morning.

Remarks concerning my first test of the θ of the fresh roots.—Please notice that the drug was first taken on the evening of August 13th, 1877, just before retiring, and the amount of urine passed the day following (August 14th) was slightly increased over the average of the normal amount. The specific gravity less than the average, and the amount of urea increased. The second day under the influence of the drug there is increased amount of urine and a marked increase in the secretion of urea. The third day more marked increase in amount of urine passed, and the amount of urea nearly the same as the second day. Also notice that on the morning of the third day (August 16th) I took the largest dose, and that dose was the last taken during this test. The day following (August 17th), amount of urine less than during the three preceding days while taking drug; also a decrease in secretion of urea that day (August 17th). This same decrease was marked for some two days after. Hence I conclude that during the three days while taking drug (August 14th, 15th, and 16th) the average amount of urine was increased; the specific gravity decreased, and the amount of urea also increased. And the observations during the two days following the stoppage of taking the drug show that

the amount of urine passed was decreased, the specific gravity increased, and the amount of urea decreased. The diarrhœa continued through the 19th of same month, and the symptoms as depicted under stools in the proving were very marked. When the normal stools were restored, the concomitant symptoms passed away. Since the disappearance of the diarrhœa the stools are so large that they cause much pain in expulsion. They do not smell so badly as previous to taking the medicine.

Had a craving appetite; food seemed to taste very good.

For some two or three nights after taking the drug had profuse perspiration.

I also had much nausea, but not associated with much retching nor any vomiting during the whole time that I was under the influence of the drug.

Had more or less pain in the back.

Feeling of weakness in the rectum, sphincter muscles feel relaxed.

Remarks on second test with 0 of fresh roots.—Since taking this last time to date (September 28th, 1877), my bowels have moved twice almost every day. Stools normal and less fetid than before taking the drug. Have noticed considerable blood on waste paper quite a number of times. The muscles of anus feel relaxed. I have also felt bearing down in rectum as if going to have piles. Anus also feels as if open. Have also noticed more flatus than usual.

Much headache, especially in right temple, this was followed by vertigo and nausea.

Have had much pain in knee joints, and the lower extremities feel stiff.

Catching pains in heart, of a quick and sharp character. Some palpitation.

Have lost four pounds since taking the medicine. Appetite exceedingly good and food relishes better.

I am inclined to think from the character of stools that the drug in some way influences the secretion of bile.

Remarks on the test with hot infusion of fresh roots with 10 per cent. alcohol.—The head and heart symptoms gradually diminishing to date (October 15th, 1877), are not now perceptible. Since the primary action of the drug on the bowels has passed away, I have had three passages almost every day, something very unusual for me, as my normal condition is only one passage per day, and that in the morning. During these days of which I speak I would feel bloated in the abdomen, with slight pains as if flatus were moving in different parts of the abdomen; this would be followed immediately by an urgent desire for stool. This desire was so sudden and urgent that I would fear that an accident might befall me. I had no control of sphincter ani muscle. These symptoms of stool *always* occurred immediately after eating. These stools were at times mushy, and at other times a little lumpy, associated with undigested food. These stools were painless, preceded by some pains of moving flatus, and followed by tenesmus and bearing down in rectum, even to protrusion. I have also noticed considerable itching in anus. After the stool a feeling of emptiness in abdomen and some protrusion; also the characteristic pain in the right temple.

My appetite was never better than during this time.

Pain in joints, especially those of the knee, associated with sticking pains

in the inferior angle of the scapula; the latter pains at times are dull and aching and last quite a long time.

Little boils on face and thighs.

I will now state (January 30th, 1878) that my bowels are regular, with one passage per day. The heart symptoms have all passed away, and the pulse is regular and normal. The only symptom that seems to remain is weakness of ani muscles; they still feel relaxed.

APOMORPHINUM.

Authorities. 2, J. G. Blackley, M.B., Brit. Journ. of Hom., 1873, p. 497, injected 10 minims of 10 per cent. solution under the skin of the left arm; 3, same, injected $\frac{1}{30}$ grain Hydrochlorate of apomorph., under the skin of the arm of William J., aged twenty-eight years; 4, Dr. Jurasz, Deutsche Arch. für. Klin. Med., 1875, p. 52; 5, M. Choupe, Gaz. Hebdom., Dec. 1874 (Lond. Med. Rev., vol. iii, p. 57), general effects; 6, Dr. Brochin, Gaz. des Hop., Jan. 16th (ibid., p. 58), effects of the hydrochlorate.

Pulse 76; temperature 98.3° (normal); feels giddy; complains of pressure at epigastrium; pulse 88, weak, but regular; pupils moderately dilated (in four minutes); began to vomit slightly (in five minutes); vomiting profusely, this continued for three minutes (in six minutes); ceased vomiting; took a drink of water, which came up immediately; milk was rejected in like manner; pulse 80, weak; temperature 98.6° (in nine minutes); still feels very giddy, and looks pale; pupils dilated (in sixteen minutes).³—Pulse 72 (before experiment); 80 (in five minutes); 65 (in twelve minutes); 70 (second day).²—[10.] Temperature 98° (before experiment); 99.2° (in five minutes); 99.2° (in twelve minutes); 97.8° (second day).²—After three minutes the pulse began to rise slightly, and the respirations became slightly accelerated. At the end of four minutes I felt a sudden qualmishness, which was almost immediately followed by nausea and profuse vomiting. This continued for several minutes, and was followed as soon as the contents of the stomach had been evacuated by severe retching. On taking a draught of water with a little brandy in it this was immediately rejected, and on drinking cold water this too returned at once. No bile, however, came up in the vomited matters. At the end of seven or eight minutes from the commencement of the experiment I began to feel very faint and was compelled to lie down, and almost on doing so fainted entirely, and remained in a state of syncope for about five minutes. On awaking from this I felt giddy and chilly, and was obliged to take a little brandy and water. This was retained, and as I began to feel slightly drowsy, I remained lying for the space of about one hour, during which time I perspired profusely. On rising I still felt slight giddiness, but no inclination to vomit. I went to bed and slept soundly all night, awaking about 8 A.M., in my usual health, slightly pale, but very hungry.²—In two to seven minutes after the injection of a solution of 1 milligram under the skin the symptoms begin, usually with dulness of the head, sometimes described as a headache, sometimes as a simple heaviness or vertigo, often associated with roaring in the ears and feeling of heat. At times the patient is suddenly attacked by a feeling of anxiety in the præcordial region, or by a pressure in the chest. With the reaction there is generally an inclination to sleep, prostration, and loss of strength, and

in a few cases nausea and retching, beginning without warning. The relaxation during the prodromal state is at times very great, reminding one of collapse, frequently associated with profuse perspiration, salivation, and paleness, especially of the face. The vomiting comes on in from four to twenty-six minutes after the injection, usually in ten to fifteen minutes after a dose of 5 milligrams. Vomiting is very easy, without effort, or after the stomach has been emptied very difficult, and associated with eructations and retching. The vomiting will occur once or be repeated two to eight times, with greater or less intensity. Between the acts of vomiting the patient is usually quiet, feels very weak, yawns or perspires very freely. Sleepiness is frequently noted. The nausea continues, frequently associated with retching or eructations, and only ceases when there is no more to vomit. Between the acts of vomiting there is very great prostration and apathy. The whole stage of vomiting varies according to the frequency of the act and the length of intervals between the acts, lasting from one to fifty minutes. After the cessation of vomiting the symptoms gradually disappear; restoration is slow, the patient feels nauseated for some time, and weak and sleepy.⁴—It appears from many experiments that Apomorphia produces vomiting by what channel soever it reaches the organism, but that its effects are more prompt and more certain when it is introduced directly into the blood by intravenous or subcutaneous injection. If given by the mouth, the dose must be increased, and the effects are less certain. During the two or three minutes immediately following the injection, the patient does not feel anything. Soon a sensation of weight at the stomach, followed by a slight pain in the head, comes on. Then salivation becomes copious, the body is covered with perspiration, one or two efforts at vomiting without any result occur, and at the third, or more rarely the fourth effort, the patient vomits three or four times successfully; then comes a period of calm. The vomitings return after an interruption of five or six minutes, followed by another interval of calm, and the same scene is repeated five or six different times, to terminate definitely at the end of about half an hour, and to give place to a very quiet sleep, lasting from half an hour to an hour.⁵—A woman, forty years of age, complained of gastric troubles without fever. After some days she was attacked by sore throat and complete anorexia. The tonsils were red and swollen and the tongue very much furred. A hypodermic injection of three or four milligrams of Hydrochlorate of apomorphia was administered to her in the sternal region. The pulse was full, and marked 100 beats. In four minutes the patient felt slight uneasiness and a little vertigo; she said she felt her head turning round and becoming stupid. She turned pale, became insensible, her pulse became extremely weak, intermittent, and then imperceptible; the pupils were dilated, and the respiration seemed to be entirely suspended. Slight tonic convulsions showed themselves in the left corner of the mouth and in the left cheek. The patient became inert and did not answer to the questions put to her. After sprinkling with cold water, inhalations of ammonia, frictions, mustard poultices, etc., she recovered consciousness in three minutes and vomited twice, after which she again fainted, became extremely pallid, and the pupils were alternately dilated and contracted; these symptoms were afterwards repeated.⁶

AQUA MARINA.

C. Wesselhoëft, M.D., Pub. Mass. Hom. Med. Soc., vol. iv, p. 31.

Sea-water causes constant hawking and raising of phlegm, white and tough, like cotton.

ARALIA RACEMOSA.

Aralia racemosa, L.

Natural order, Araliaceæ.

Common name, Spikenard (American name).

Authority. S. A. Jones, M.D., Hale's New Remedies, third edition, p. 471. At 3 P.M., I took 10 drops of the mother tincture in 2 ounces of water.

On retiring at 12 P.M., felt as well as I ever did. Had no sooner laid down than I was seized with a fit of asthma. I had laid upon my back when the following symptoms had supervened: Dry wheezing respiration, sense of impending suffocation, and rapidly increasing dyspnoea. Very loud musical whistlings during both inspiration and expiration, but *louder during inspiration*. The attack soon reached its acme, and phlegm began to come up. It was scanty, but each expectoration was attended with a sensation that more would soon follow. My wife now observed that my wheezing was so labored as to make the whole bed vibrate. Could not possibly lie down; felt that I would suffocate if I did not sit up. Phlegm began to come freer and more abundantly; had a markedly salty taste, and felt quite warm in the mouth. Right lung appeared to be more oppressed than the left.

When the worst of the attack was over I lay on my right side, and then it seemed as if all the oppression and discomfort was in the right lung. Shortly after I turned over, and soon it felt as if my left lung was affected, *while the right was entirely relieved*.

It took a long time for me to "come to." Had a constant desire to clear the chest of something, so that I could inspire better. *All the obstruction seemed to be in inspiration*. On making a forcible expiration, in the attempt to clear the chest, had a raw, burning, sore feeling behind the whole length of the sternum, and in each lung, most intense behind the sternum. Slept well all night. After rising in the morning, raised some loose phlegm easily.

I am inclined to asthma, and at first thought this one of its attacks; but as the phenomena were evolved, the programme was so different that my drink of *Aralia* flashed into memory.

On the night of the 28th I was literally drenched with perspiration while asleep. Was awakened by a patient, when it passed off and did not recur.

29th. I have been annoyed all day by a dread that my right lung is seriously diseased. Could not shake off the fear. Cough now and then, raising a little phlegm, which is involuntarily swallowed. Took 10 drops of the tincture at 1.30 A.M. No symptoms that night. On rising at 8.30, bowels felt as they have done after a large-sized "spree." Faintly defined nausea in throat and stomach, and sensation in intestines as if diarrhoea would set in. At 3.15 P.M. went to closet, expecting from my feelings a loose stool. Evacuation was soft, yellow, about a teaspoonful in quantity, and expelled with great difficulty. Mucous membrane of rectum came down like a tumor. (Have had hæmorrhoids.) After stool, and

while sitting on the "throne," an aching pain in the rectum, extending upwards, and on the left side.

Feel weak, prostrated, half sick, and filled with a vague nausea.

ARANEA.

Authorities. 1, La. Clinique (Bost. Med. and Surg. Journ., vol. iii, 1830, p. 167), a lady applied a plaster made of equal parts of the domestic spider and treacle, for toothache; 2, National Recorder, Phila. (Am. Journ. of Med. Sci., vol. xix, 1836, p. 267), a man was stung by a spider on his foot, death; 3, Isaac Halse, M.D., Am. Journ. Med. Sci., vol. xxiv, 1839, p. 69, Mr. Q., was stung on the glans penis by a large dark-brown spider, covered with hairs over the legs and body; 4, F. Grinnell, M.D., Cincin. Lancet and Obs., vol. xix, 1876, p. 900, Mrs. W., was bitten on the tongue by a black spider (variety, *Salticus familiaris*).

In ten to twelve hours, the hand, forearm, and lower half of the arm became swollen and extremely pallid, of a dark-yellowish color, and covered with a multitude of vesicles, accompanied by fever and anxiety. These symptoms lasted for six weeks.¹—The next day the lymphatic streaks were perceptible as high up as his knee, on which was a purple swelling.²—In one hour, writhing under the most acute suffering. Vomiting with great violence, and complaining of deepseated pain in the abdomen, extending up into the chest, and of sensations of choking and suffocation. The vessels of the back and neck were greatly distended, and of a dark hue. Pains and spasms along the spine and extremities.³—Instantly a painful sensation, as though arising from several points, darted along the tongue, painfully affecting the tongue, jaws, and head. The effects were instantaneous, and were compared to a shock from an electric battery. The tongue seemed almost paralyzed, the utterance thick and heavy, and the pains at the root of the tongue and in the lower jaw, especially at its articulation with the temporal bones, were most excruciating.⁴

ARGEMONE.

Argemone Mexicana, L.

Natural order, Papaveraceæ.

Common name, Prickly poppy.

Barham, Hort. Amer., p. 152 (Pharm. Journ., vol. iv, p. 167), a negro smoked a quantity of the seeds.

Before he had smoked out his pipe, he fell into a sound sleep; not easily awakened.

ARGENTUM NITRICUM.

The following, taken from the original, is deemed worthy of insertion, in place of the fragmentary reference in volume i.

Das silber, Arzn. betrachet. Dr. Krahmer, Halle, 1845, p. 84. Quoted experiments of Schachert, Diss. de usu Argenti nitrici intermo, Regimont, 1837.

He took $\frac{1}{2}$ grain of Nitrate of silver in distilled water, frequently repeating the dose; slight burning in the stomach. Afterwards took $\frac{1}{4}$ grain,

then $\frac{1}{2}$ grain, daily. The burning sensation in the stomach became quite severe. The tongue showed in various places a dark-bluish color, and in the stomach there was a sensation of increased warmth and some nausea; these symptoms disappeared after taking food. The stools and pulse were not affected. Some time after this, Schachert increased the doses to a grain, which he took an hour and a half after dinner. The burning in the throat was very severe. The tongue showed for several days a dirty-brown color. The warmth in the stomach increased to nausea and retching, without actual vomiting, and after a few hours gave place to a persistent, periodically aggravated sensation of compression in the stomach. Towards evening diarrhoea set in, and continued during the next day, with relief of the pressure in the stomach. The evacuations seemed thin, but their color was normal. In addition to these sometimes there was a distressing dull headache, seated especially in the forehead, and associated with a certain prostration and restlessness. Changes in respiration, pulse, and secretion of urine were not marked. On the third day all the symptoms of the drug action had disappeared. Eight days afterwards Schachert took $1\frac{1}{2}$ grain in the morning fasting. He experienced nausea and efforts to vomit. He felt unwell through the day and suffered from dull headache.

Krahmer's experiments on himself, p. 119.—When I began my experiment I was quite well and strong, but afterwards was sick, and my stomach suffered for many days after I had discontinued the use of the silver; I frequently had heartburn, from which I had never before suffered, though these symptoms gradually disappeared. But in their place there soon appeared an almost uninterrupted neuralgic pain in the left infra-orbital region, which for some moments became most terribly severe, and lasted with interruptions the whole following winter. At the same time the action of the heart became irregular, and the beats at times omitted, when I had a distinct disagreeable sensation in the chest. To this was added a constant sensation of faintness in the præcordial region. I found that on turning my attention to the action of the heart its irregularity became more marked, but on moving about freely the sensation at times entirely disappeared. Upon my disposition these symptoms had no effect. The paroxysms of anxiety at the heart were not associated with it. Physical movement was uninterrupted, only sudden violent muscular action, as for example, jumping or rapid running upstairs, or after emotional excitement, caused violent palpitation; the disagreeable sensations were least marked in a horizontal position, and in the evening in bed. Sleep was rarely disturbed by palpitation. Towards the end of the winter the attacks diminished in intensity. Physical signs of anything abnormal about the heart were entirely wanting, as I was assured by an eminent medical friend. The next summer all morbid symptoms had entirely disappeared. That these changes in my condition were really the results of the silver I have no manner of doubt; there is no other explanation of them, and I make this communication in hope that my colleagues, who may have the opportunity to make similar observations, may be able to verify them.

In observing the action of silver I have endeavored as far as possible to pay attention not only to all the subjective, but also to all the objective symptoms; changes in the pulse, temperature, and character of the urine have been especially observed. I lacked the proper apparatus to ascertain the amount of carbonic acid eliminated by respiration.

My average pulse in the morning after rising was 66; at noon, soon after returning from my visits, 72; and in the evening, ordinarily 68. A strict milk diet for more than two weeks had no effect upon the character of the pulse. My temperature is from 29.6° to 30° R. I examined the urine, keeping account of the total amount, specific gravity, amount of water, quantity of uric acid, urea, and incinerated salts.

In order to have correct data, I examined the urine from the 6th to the 19th of October. I rise at 6 A.M., breakfast on two cups of coffee, am busy reading or writing till 9, visit patients till 1, then take dinner; work till 5 in my office, make evening visits, take supper at 8, go to bed about 11. Noon and evening I usually drink a glass of beer or wine. From October 19th to November 6th, I kept a very strict regular diet; took daily 2293.7 grams of fresh milk, and 418.5 grams of white bread.

October 26th, I took 0.1 grain crystals four times; 27th, same; 28th, 0.2 grain; 29th, the same; 30th, 0.3 grain four times; 31st, 0.4 grain four times; November 1st, 0.5 grain four times; 2d, 0.6 grain four times; 3d, 0.8 grain four times; 4th, 1 grain four times; 5th, $\frac{2}{3}$ grain four times.

A consequence of the strict diet was that the stools, which are usually regular, were affected, so that October 21st, one was evacuated only after violent and painful effort, and on the 23d there was no voluntary stool. After several hours' effort to evacuate hard feces, I took 1 ounce of castor oil. In the evening there was a hard painful stool, and the next morning a pasty stool. On the 25th, repeated the oil, and the night of the 25th and 26th, took in addition an extra $\frac{1}{2}$ ounce of the oil. On the 28th again took oil, also on the 29th, and from the 29th to the 2d of November, I took daily a teaspoonful of castor oil, so that the stools continued without great difficulty. After November 3d, I did not require the oil, because the large amount of silver nitrate kept the feces soft. November 2d, my stomach began to suffer. At noon, after taking milk and bread, I experienced a pressing sensation of fulness in the epigastric region. November 3d, especially towards evening, the whole abdomen was very tense. November 4th, there was violent headache, and I could scarcely force myself to take the necessary amount of nourishment. The night was restless; I could not remain in bed after 4 o'clock. November 5th, I was still more averse to food, though the taste was natural and the tongue not coated. Through the day I had violent headache. The following night was very restless. I rose at 3 o'clock, and took nothing but a glass of milk before noon. The headache was very violent. In the afternoon, after passing the last quantity of urine for examination, I took two cups of strong black coffee, after which I felt quite relieved. Supper was relished, but the next day I could take but a very small quantity of food on account of heartburn. The action of the silver seemed to cause a sensation of satiety, and my stomach seemed to need less nourishment than in a state of health. In the morning I took $\frac{1}{4}$ grain in a pill form with white sugar dry on the tongue. I immediately experienced a very bitter taste, followed by warmth in the tip of the tongue, then in the pharynx, after which these two symptoms seemed to alternate with each other. I drank a little distilled water, which was followed by slight eructations, and a sensation of catarrh in the fauces and larynx. At noon, before dinner, I dissolved my dose in a drachm of distilled water. I experienced a sweetish taste and feeling of warmth in the mouth. Three hours after dinner took $\frac{1}{4}$ grain in distilled water. The sensations were the same as before, but perhaps more severe. The scraping sensation in the pharynx provoked hawking and coughing.

After a quarter of an hour I had a sensation of warmth between the scapulae and sternum, which gradually became a pinching and slight pressure in the epigastric region. This was followed by tasteless eructations. The next morning I took 1 grain in water, and had only a very bitter taste. After ten minutes there was only very transient nausea.

The relation of the urea to the solid constituents in my case is somewhat less than the average given by Simon in his *Handbook*. I had an average of 26.3 per cent. of urea, perhaps dependent upon the peculiarity of my diet, which is generally vegetable. Under the effects of the milk diet this per cent. rose to 37.6, and the amount of uric acid became quite small, which during my ordinary diet was 0.6, but was now reduced to 0.045; the amount of solid constituents was not essentially changed by the silver, nor was the amount of urea perceptibly changed; the average was 33.5 per cent.; the whole amount daily excreted was 1.5 gram. Uric acid entirely disappeared from the urine under the influence of the silver. The amount of incinerated salts during the milk diet remained very constant. After several days' use of the silver it rose slightly. In the evening of November 6th, there was found 0.127 gram of pure silicic acid; so far as I know no analysis of urine has shown a like amount of silicic acid. No changes were noticed in the circulation or temperature. Silver was not found in the urine.

“ARISTOLOCHIA COLOMBIANA.”

So called by Higgins in his “Ophidians,” is an *unknown plant*; it is not possible to identify it; hence the symptoms given by Dr. Higgins have no place in this work.

The same remark applies to “a proving” of *Ampelopsis trifoliata*, published recently in the *Investigator*.

ARNICA.

Authorities. 40, J. Epps, M.D., *Lancet*, 1840-1 (2), p. 365, a lady applied the tincture to corns; 41, Dr. Morrison, *Month. Hom. Rev.*, 1873, p. 471, Miss O. B., suffering from toothache, rubbed in some mother tincture; 42, 43, 44, Jas. C. White, M.D., *Bost. Med. and Surg. Journ.*, vol. xcii, 1875, p. 61, cases of poisonous action of the tincture on the skin; 45, E. W. Berridge, *U. S. Med. Invest.*, New Ser., vol. iv, 1876, p. 573, a boy took 200th (Lehrmann); 46, same, a boy, æt. nine years, a patient, took 1000th (Jen.); 47, J. Fayer, M.D., *Practitioner*, vol. xvi, 1876, p. 52, effects of application of tincture; (48 to 58, A. Imbert Gourheyre, M.D., *Memoir on Arnica*, addressed to the World's Hom. Con., at Philad., 1876); 48, Madame C. took two tablespoonfuls; 49, a man, æt. sixty-nine years, fell five or six meters, and felt so bruised that he took a dose of a decoction of 30 grams of Arnica flowers in two glasses of water; 50, Ferrand, *Journ. de Chim. Med.*, Sept., 1869, a man, æt. thirty years, swallowed 15 grams of the tincture; 51, Ferrand, *Journ. de Chim. Med.*, Sept., 1869, a woman took two cups of an infusion prepared with a pint of the flowers; 52, Berlin, *Central f. d. Med. Wissen*, Nov., 1874, a workman swallowed at one draught 60 to 80 cc. of the tincture, death in thirty-eight hours; 53, Beilt, *Dict. des Sci. Med.*, 1812, a man was gorged with a decoction of the flowers after a fall; 54, Guillemot, *Etude sur les Prop. Physiol. et Therap. d'Ar-*

nica, a student took 18 grams of alcoholic Arnica tinct.; **55**, Attomyr, *Primeiner Naturg. der Krank.*, Wien, 1851, a man, æt. fifty years, rubbed his wounded hand and foot with a weak tincture; **56**, Blake, *Month. Hom. Rev.*, Sept., 1874, Mrs. W., æt. fifty years, applied to her sprained ankle a cloth saturated with the pure tincture; **57**, an officer applied a compress of pure Arnica to a hydarthrosis of the left knee; **58**, effects on a patient; **59**, Chas. W. Earle, M.D., *Chicago Med. Journ. and Exam.*, vol. xxxv, 1877, p. 267, Mr. L. applied to a slight injury of the knee the tincture, which came in contact with other parts; **60**, D. Dyce Brown, M.D., *Month. Hom. Rev.*, vol. xxii, p. 171, a lady, æt. fifty-four years, had leucorrhœa and then a bloody discharge, with all the sensations which used to accompany the period, took Arnica 3d, three or four times a day, and afterwards 200th; **61**, R. S. Harnden, *New Remedies*, 1878, p. 357, a man applied the tincture to the stump of his arm, which had been amputated.

Loss of appetite at supper, for two successive days,⁴⁵.—Immediately after drinking it she felt a burning pain in the throat, which persisted; five minutes afterward violent pain at the pit of the stomach, lasting a quarter of an hour; at the same time warmth and sweat, which obliged her to change her chemise. There was also some nausea. At the end of half an hour a small stool, with colic. After this painful cramp of the stomach, an almost irresistible desire to sleep followed. I arrived forty minutes after the accident. I found the patient in bed, face red, pulse frequent, skin hot, panting, complaining of nothing but sleepiness,⁴⁸.—Immediately seized with a violent burning in the stomach, followed by colics,⁵².—Feeling as if the abdomen were all slit down; worse on stooping,⁴⁶.—The first effect was to make the toes itch dreadfully, keeping her from sleep the greater part of the night. The second effects, those which troubled her most, and were the most painful, presented themselves in the morning; the face was swollen and painful, the pain being smarting, particularly under the eyes; there was great heat in the face; the patient presenting, be it remarked, the three characteristics of inflammation, swelling, pain, and heat. Besides these symptoms, blotches came out on the cheeks and the forehead, which, together with the swollen condition, did not disappear for three days, then leaving the face rough,⁴⁹.—Erysipelas extending over the left cheek, from under border of the lower maxilla to scalp, with intolerable irritation, and considerable constitutional disturbance,⁴¹.—Thursday I took four pilules of Arnica 3d, and three the next day. Towards evening my face ached. Next morning I felt very poorly, I took one pilule early, and another about 12 M., but my face got worse, and by evening I had every appearance of erysipelas, had to go to bed, cover it with flour, and take Bell. and Aconite diligently. During this time I felt extremely ill. I remained in bed till Monday morning, by which time the swelling had gone down, and I gradually got better. I have had erysipelas so often that I am always nervous about it. A few days later, after two globules of the 200th in one day, and one globule the next day, was from home from 9.45 A.M. to 4 P.M., in and out of shops. About an hour after I came in my face got hot and began to swell, but slightly. However, it was stiff and uncomfortable, so I took Aconite, and though I am still redder than usual and a little stiff, I have had no other ill effect,⁶⁰.—A gentleman, sixty-five years of age, slipped and scraped the lower part of his back, to which the tincture of Arnica was applied. In a short time a good deal of itching was felt in the back, which caused the parts to be rubbed vigorously. On examination the skin was found to be already greatly congested, and the

irritation of the parts increased during the day and night. On the next day the skin of the back, nearly to the shoulders, was in a state of active hyperemia, and already covered with innumerable papules. The inflammatory process spread rapidly downward nearly to the knees, and forwards upon the abdomen and genitals. In a few days these parts presented all the characteristic appearances of acute eczema in its various stages of progression; general hyperæmia, papules, vesicles, excoriating and exuding surfaces, and crusts. The subjective symptoms were intense itching, stinging, and burning in these parts. Scarcely any clothing could be borne in contact with the skin by day, and sleep for a few nights was almost impossible, but the system generally was only slightly disturbed,⁴².—[920.] In the morning every part of the integument which had been touched with the Arnica was slightly red and swollen, erythematous (second day); swelling and redness increased, some fever (third day): vesicles between fingers and upon the left knee (fourth day); vesicles upon portions of all the integuments (except eyelids) with which the Arnica had come in contact, eczema (fifth day); eye nearly well; integuments less swollen; considerable itching and burning; pustules around the margins of the affected parts (sixth day); intense itching and burning, and itching of the thorax and abdomen. An examination showed a profuse redness or vascular congestion of the entire surface, and the presence of what Wilson would probably call eczema erythematosum (seventh day); eruption on body disappearing; crusts forming on legs; fingers nearly well (eighth to twelfth day); crusts clearing; pruritus disappearing; new skin looking healthy (thirteenth to fifteenth day),⁵⁹.—A gentleman, sixty years old, applied to his right arm above the elbow a fomentation of tincture of Arnica on two successive days. The part became generally reddened and swollen in a few days, and the day after the applications were made he consulted me. The arm from the elbow to the shoulder was considerably swollen, of a vivid redness, and covered over the lower half of this district with a very thick eruption of papules, many of which were already partially converted into pimples. Great itching and burning was felt in the part, which gradually ceased as the inflammation subsided. The efflorescence under treatment did not progress to the vesicular stage, and the skin returned to its normal state in ten or fourteen days subsequently,⁴⁸.—Arm began to swell and break out with little papules, then with vesicles, and finally to become excoriated. The whole arm became intensely red; the swelling, itching, and burning, accompanied with pain, being very great, and the discharge of serum constant from the excoriated surface,⁶¹.—Swelling followed a strained wrist, to which was applied Arnica; a vesicular erysipelas of the whole arm followed, lasting three weeks. A year after he had erysipelas of the leg, after applying Arnica to an excoriation. He used a gargle of 15 or 20 drops of the tincture to a glass of water for toothache; the mouth and lips became inflamed; a severe erysipelas of the face followed, which lasted ten days,⁵⁴.—To a sprained wrist I applied a weak solution of tincture of Arnica. In a few days a few small papules appeared on the skin, but they quickly disappeared, and the surface seemed sound. About six days later I came in contact with a nettle, which stung the wrist very slightly. On the same evening violent irritation of the part set in, and the skin of the wrist and forearm, exactly corresponding to the early application of the tincture, became hot, painful, and affected with an intolerable itching and burning sensation. The following day it was much worse. The skin was much inflamed, and the pain extended up the arm

to the axilla, the absorbents being very painful. The skin was red, brawny, and covered with patches of an eczematous character,⁴⁷.—Inflammation of the hand, which acquired a scarlatinous redness, and erysipelas followed,⁵⁵.—A gentleman, æt. fifty-two years, dressed his sprained knee with fomentations of tincture of Arnica and water. After two days' use the knee became red, the redness extending down the leg nearly to the ankle, and upon this surface there was developed in a few days a general eruption of papules. A similar process, but of less severity, ensued a day or two later upon the inner surface of the corresponding part of the other leg. The efflorescence upon the legs did not pass into the vesicular stage generally, but remained at its height for a week, and then very gradually subsided under treatment. Three days after the use of the fomentations, an inflammation of the skin of the face began, which increased in severity until I saw him, a week after the injury. His whole face was then very much swollen, of a deep red color, and covered with papules and vesicles towards its periphery, whilst upon the central portions was a very free exudation of serum from many excoriated points, which in parts had stiffened into crusts. The vesicles and papules of the forehead were arranged in prominent and isolated clusters of two or three individuals each. The subjective symptoms were mainly intense itching, with slight burning, and considerable suffering was thereby occasioned for several days,⁴⁸.—Erysipelas in the course of twelve hours. A band of inflammation about three inches in width, and nearly encircling the ankle-joint; color dusky purple, the upper part raised into large flattened blebs, the lower part slightly suppurated, the foot and leg somewhat œdematous; the swelling extended several inches; the whole most exquisitely tender, and appearing like a severe scald or burn more than anything else; the general disturbance was very slight, except from want of sleep; one eye was slightly inflamed, and the eyelids were swollen; a small patch of erysipelas on the palm of the right hand,⁵⁶.—Two days afterward enormous swelling of the knee and of the thigh. Two days later diminution of the swelling, but appearance on the knee of an eczematous eruption, with crowded lenticular bullæ, which lasted three weeks. The compresses having naturally touched the right knee, there was eczema here also, less severe but quite as lasting; it was also upon the fingers of the hand which had touched the Arnica. The eruption was very painful,⁵⁷.—Violent twitchings, extreme anxiety, a feeling of constriction at the level of the attachments of the diaphragm, paleness, cold sweat, pulse small and frequent, convulsive movement in the limbs, alternating with trembling of the whole body,⁴⁹.—[930.] After twenty minutes he had a violent headache, vertigo, nausea, and vomiting; these lasted an hour, followed by drowsiness and deep sleep,⁵⁰.—Obstinate vomiting, vertigo, convulsions,⁵¹.—Violent vomiting, intense headache, choleraic diarrhœa, epigastric pains and colics, general weakness, shivering of the extremities, pulse very slow and small,⁵¹.—In five minutes his pulse fell from 70 to 64; at first irregular, it soon became thready and evaded the finger. He experienced an unendurable præcordial anguish; it seemed to him that his heart stopped, and was going to cease to beat; in fact on applying the hand to the præcordial region, one perceived the feebleness and intermission of the cardiac contractions. His face grew pale and almost immediately a great muscular weakness followed; his knees failed him and he felt a desire to sit down, which he could resist only by a strong effort of the will. There were fibrillar contractions of isolated muscular fasciculæ, especially manifest in the region of the jaws, and a sort of constriction of

the temples. We follow with the fingers the spinous processes of all the dorsal vertebræ. The pressure does not give rise to any phenomenon, but as the finger descends and presses on the dorsal vertebræ a lively and sudden sensation of illness is felt, and some involuntary jerks in the muscles of the nape of the neck and of the back; the head is thrown backward, the trunk is upright. At the level of the last dorsal vertebra the sensation of illness provoked by the pressure is so great that the patient shrinks from our observation. This rather strange localization of the pain, on the level with the last dorsal vertebra, seems to us remarkable; we will attentively study the phenomena which accompany it. Pressure develops pain in the waist at this point only, these pains radiate to the epigastrium; the patient complains of suffocation, and of a sensation like a weight on the chest. These rather alarming symptoms did not last more than twenty minutes. After half an hour there was only great weakness, depression, paleness, a sensation of emptiness in the head, a slight trembling of the hands, some nausea, then great sleepiness. This condition lasted until evening. At 10 P.M. the pulse was still feeble and irregular, temperature $36\frac{6}{10}^{\circ}$ C.; the night was pretty good. The illness terminated the next day by some loose stools, with tenesmus.³⁴

ARSENICUM ALBUM.

Authorities. (227 to 230, from Berridge's Collection, in appendix Brit. Journ. of Hom.); **227**, Thos. Garnett, Med. and Phys. Journ., 1801, 542, fatal poisoning of a man by pills of Ars., butter, and flour; **228**, Dr. S. Barnum, Med. Repos., 1802, p. 43, a woman took a solution; **229**, Dr. Yelloby, Edinb. Med. and Surg. Journ., 1809, p. 389, a boy, æt. sixteen years, took a pennyweight; **230**, W. J. Crowfoot, Med. and Phys. Journ., 1815, 441, children ate it in food; **231 to 235**, John Marshall, Remarks on Arsenic, London, 1817, effects on five persons of eating dumplings containing oxide of arsenic, **233** being a woman seven months' pregnant; (236 to 241, from Berridge); **236**, J. Hume, Med. and Phys. Journ., 1821, p. 466, Mrs. —, æt. twenty, took arsenic; **237**, Astley Cooper, Lancet, 1823–24, 156, application to the eye for fungus; **238 to 241**, Alexander Murray, Edinb. Med. and Surg. Journ., vol. xviii, p. 167, poisoning of a family; **242 to 244**, Robert Christison, M.D., Trans. Medico-Chirurg. Soc., 1825, fatal cases; (245 to 248, from Berridge); **245**, Robert Christison, Edinb. Med. and Surg. Journ., 1827, p. 441; **246**, John Elliotson, Med.-Chir. Rev., 1828, p. 265, a woman, æt. about sixty years, took arsenic; **247**, Christison, Edinb. Med. and Surg. Journ., 1830, p. 67, six persons took it in champagne; **248**, Journ. Univ. et Hebd. (Med.-Chir. Rev., 1832, p. 162), several persons took it in food; **249**, T. Bost. Med. and Surg. Journ., vol. xiii, 1835, p. 334, fatal poisoning of T. D.—, æt. twenty-three years; (250 and 251, from Berridge); **250**, Lancet, 1835–6 (1), 436, a girl, æt. twenty-two years, swallowed 1 oz.; **251**, Journ. de Pharm. (Lancet, 1837–8 (2), 625), several families drank water impregnated with Arsenic; **252**, B. E. Cotting, Bost. Med. and Surg. Journ., vol. xviii, 1838, p. 78, a man, æt. twenty-two years, took about 2 oz., in wine and water; (253 to 292, from Berridge); **253**, Londonderry Standard (Dublin Med. Press, 1840, p. 371), poisoning; **254**, Theophilus Thompson, Lancet, 1843–4 (1), 98; **255**, Dr. W. Woodcock, *ibid.*, 1845 (1), 640, Mrs. W., took $1\frac{1}{2}$ teaspoonful; **256**, J. M. Adams, North. Journ. of Med., 1845, p. 262, J. P., æt. forty-two

years, took 2 drachms; **257**, Historical Register (Lond.), (Dublin Med. Press, 1845, vol. xiii, p. 61), a man made arsenical candles; **258**, Allison, Lancet, 1845 (1), p. 413, a girl, æt. thirteen years, took a large teaspoonful before 4 P.M., and another dose before 5; **259**, Linoli, abridged from Ann. Univ. de Med. (Med. Times, 1846), two men and three children had same symptoms from Arsenic in food; **260**, J. Hakes, Edinb. Med. and Surg. Journ., vol. lxvi, 1846, p. 43, a family drank water containing Arsenic, several cases fatal; **261**, Dr. Letheby, Lancet, 1847 (1), p. 44, a girl, æt. nineteen years, took at night 2 oz. fly-water, containing 2½ ozs. white Arsenic, death in thirty-six hours; **262**, Dr. L. Owen Fox, Lancet, 1848 (2), 503, fatal poisoning of a man, æt. twenty-one years, by a teaspoonful; **263**, Wm. Robert Cornish, *ibid.*, 1849, p. 35, a man took 1 oz.; **264**, same, a girl took 1 oz.; **265**, Dr. Michael McGee, *ibid.*, p. 311, a girl, æt. ten years, took 10 grs. or more; (266 to 285, from Dublin Quart. Journ. Med. Sci., 1851, and Dublin Med. Press, 1850); **266**, a man and woman, each took 24 grs.; **267**, M. G., æt. fifty-six years, took 1½ oz., fatal in twelve hours; **268**, Miss D., æt. eighteen years, took Arsenious acid; **269**, J. G., æt. thirty-three years, took Arsenic acid in tea, and on the fourth day took 2 teaspoonfuls in coffee and milk; **270**, a man, æt. between twenty-five and thirty years, took Arsenic in food; **271**, five persons ate a cake in which a teaspoonful had been put; **272**, a woman, æt. twenty-five years, took some in water; **273**, poisoning of five persons; **274**, poisoning of seven persons; **275**, two persons took it in food; **276** to **278**, a family poisoned by Arsenic in food; **279**, fatal poisoning of M. J. B.; **280**, a boy, æt. two years, took a spoonful of rat-powder (Arsenic and flour); **281**, a girl, æt. four years, took the same; **282**, M. B., æt. thirty years, took nearly a spoonful in gruel and porter; **283**, a man and woman took it in punch; **284**, four persons took it in food; **285**, five persons took it in soup; **286**, Dr. G. E. Sanger, Guy's Hosp. Rep., 1851, 183, poisoning of a man, æt. nineteen years; **287**, Chambers's Edinb. Journ. (Dublin Med. Press, vol. xxvii, 1852, p. 63), effects of leaving off Arsenic-eating; **288**, Dr. T. R. Mitchell, Med. Times and Gaz., 1853, p. 612, a man rubbed the liniment into axillæ, pubes, and scrotum; **289**, Dr. T. Brown, Assoc. Med. Journ., 1853, p. 878, a woman, æt. twenty-four years, took Arsenic to procure abortion; **290**, M. Dandin, Annal. d'Hyg., 1854, case of poisoning; **291**, Tschudi's report, Journ. de Chim. Med., 1854 (Bost. Med. and Surg. Journ., 1855, vol. li, p. 189), effects of suspension of Arsenic-eating; **291a**, same, a man took an overdose; **292**, Dr. Wilks, Guy's Hosp. Rep., 1855, p. 364, a man, æt. fifty years, took probably three teaspoonfuls; **293**, Samuel C. Pointer, M.D., Med. and Surg. Reporter, vol. ix, 1856, p. 210, Agnes Corbet, æt. twenty-one years, swallowed a teaspoonful, death in twelve hours; (294 to 296, from Kesteven, Brit. Med. Journ., 1856); **294**, Dr. Jago, effects on workmen; **295**, Mr. Pointer, poisoning; **296**, Kesteven, effects of leaving off Arsenic-eating; **297**, Dr. Halley, Pharm. Journ., vol. xvii, 1857, p. 428, Arsenic in paperhangings; (298 to 319, from Berridge); **298**, Dr. Walter Watson, Lancet, 1857 (2), 281, effects on shepherds of washing sheep with Arsenic; **299**, Dr. Robert Crawford, *ibid.*, p. 127 and 181, effects of same; **300**, Dr. W. G. Meacham, N. Y. Journ. of Med., vol. iv, 1858, p. 430, poisoning of a man, æt. twenty-five years; **301**, Jas. Whitehead, Brit. Med. Journ., 1858, p. 804, a young man poisoned by arsenical wall paper; **302**, Mr. H. G. Trend, *ibid.*, p. 725, a woman took Arsenic twice a day, for three months, altogether two tablespoonfuls, to procure abortion; **303**, Jas. Begbie, Edinb. Med. Journ., 1858, vol. iii, p. 961, observations of Valleix

and other French writers; **304**, Begbie, *ibid.*, effects in a case of chorea; **305**, Dr. Gibbs, *Lancet*, 1858 (1), p. 613, a lady took it many years for an eruption; **306**, Dr. Wm. N. Brown, *Edinb. Med. Journ.*, 1858, vol. iii, p. 148, a man washed sheep with a solution of white Arsenic; **307** to **312**, Dr. Robert Paterson, *ibid.*, p. 391, different cases of poisoning; **313**, Scheffler in *Gesundheit der Bergleute*, effects on cobalt miners; **314** and **315**, Dr. A. S. Taylor, *Ophth. Hosp. Rep.*, 1859 (1), 270, effects of arsenical wall-paper; **316**, *Dublin Med. Press*, 1859, vol. xli, p. 280, shepherds were poisoned by washing sheep with an arsenical wash; **317**, Harles, *Med. Circular*, vol. xiv, 1859, experiments on healthy men with $\frac{1}{2}$ gr. of Arsenious acid; **318**, Gonffia's experiments on himself, *ibid.*; **319**, *Manchester Guardian*, *Pharm. Journ.*, vol. xxiv, 1859, p. 482, three children were poisoned by arsenical wall-paper; **320**, Dr. Lorenz, quoted by Heisch, *ibid.*, p. 556, Arsenic-eaters of Styria; **321**, same, effects on a gentleman; **322**, J. B. Metcalfe, *ibid.*, vol. xx, p. 343, poisoning of Clarence King, æt. three years and a half; (323 to 329, from Berridge): **323**, Dr. R. Biggs, *Lancet*, 1860 (1), p. 8, poisoning by paper; **324**, Dr. Ballenden, *ibid.*, p. 579, poisoning of three children by the same; **325**, *MS. Reports of St. Barth. Hosp.*, 1860 (*Month. Hom. Rev.*, vol. xiv, p. 425, Rachel and Emma Taylor, partook of a pudding containing a teaspoonful of white Arsenic; **326**, Dr. Thomas Orton, *Lancet*, 1862 (2), p. 576, poisoning by paper; **327**, Mr. Simon's *Pub. Health Reports*, *Brit. Med. Journ.*, 1863 (2), p. 435, symptoms from *Ars. green*; **328**, Dr. D. McN. Parker, *Edinb. Med. Journ.*, 1864, vol. x, p. 116, effects of Arsenic-eating on a man, æt. thirty years; **329**, Craig MacLagan, *ibid.*, p. 200, effects of Arsenic-eating; **330**, R. C. Hamil, M.D., *Chicago Med. Exam.*, 1865, p. 643, Mr. H., æt. twenty-five years, took 6 or 7 drachms in cold water; after half an hour an emetic and hydrated oxide of iron were given, vomiting produced; **331**, A. S. Taylor, *Guy's Hosp. Rep.*, 1865, 277 (Berridge), poisoning of three children by Arsenic in vermin powder; **332**, Dr. Docherty, *Glasgow Mon. Journ.* (*Pharm. Journ.*, 2d ser., vol. vii, 1866, p. 243), Mrs. Keechan took $\frac{1}{4}$ oz. in milk; **333**, Profs. Grote and Mosler, *Berl. Klin. Woch.*, 1866, p. 60, a boy, æt. two years, ate a piece of paint; (334 to 339, from Berridge); **334**, Dr. F. Duckworth, *Madras Quart. Journ. of Med. Sci.*, vol. ix, 1867, 304, Arsenic in food; **335**, Hutchinson, *Lancet*, 1869 (2), 508, general effects; **336**, Dr. Seissei, *Ærtz. Intell. Blatt*, 1869 (*Brit. Med. Journ.*, 1869 (1), 424), four hundred persons poisoned by bread; **337**, Thomas Graham, *Glasgow Med. Journ.*, 1869 (1), 56, poisoning; **338**, Dr. Hicks, *Lancet*, 1870 (2), 356, a man, æt. forty-eight years, was engaged in pulling off wall-paper; **339**, Berridge, *Month. Hom. Rev.*, 1870, 430, a friend of mine suffering from skin eruption, took the 6th; **340**, *Brit. Med. Journ.*, 1871 (2), 101, poisoning by wall-paper; **341**, Martineau, *L'Union Med.*, April, 1873, p. 558, poisoning; (342 to 344, from Berridge); **342**, Dr. Clement Walter, *Brit. Med. Journ.*, 1873 (2), 700, a lady was poisoned by wall-paper; **343**, Dr. J. Liddell, *ibid.*, p. 772, effects of wall-paper; **344**, Dr. John Morley, *ibid.*, 88, poisoning of fifteen persons by Arsenic; **345**, Dr. Merbach, *Vjs. für Ger. Med.*, 1875, p. 48, poisoning; **346**, H. S. Jones, M.D., *Virginia Med. Month.*, 1875, p. 194, Jesse Thomas, æt. twenty-two years, swallowed nearly a teaspoonful; (347 to 372, from Tardieu, *Étude méd. lég. et clin., sur L'Empoisonnement*, Paris, 1875); **347**, Arsenic in milk; **348** and **349**, other cases; **350**, Devergie, *Med. lég.*, 3d edit., t. 3, p. 525, poisoning; **351**, same, a girl, æt. seventeen years, took 10 grams; **352**, Dr. Lachèse fils, *Ann. d'hyg. publ. et de méd. lég.*, 1re ser., t. 17, p. 340,

a girl took a large quantity; **353**, Laborde, Journ. de med.-chir. et pharm., 1787, p. 89, poisoning; **354**, Bull. de la Soc. Anat., 1853, 179, a girl took a large quantity; **355**, Ann. d'hyg., publ. et de méd. leg., 1847, 390, poisoning; **356**, Dr. Bineau, Journ. des cours méd.-chir., 1835, 190, five children, from five to nine years, were poisoned; **357**, Guilbert, Journ. de Van der Monde, 1756, 353, a man took a large quantity; **358**, Barrier, Journ. de méd., 1873, 353, five men were poisoned by a solution; **359**, Dr. Coqueret, Journ. des connais. medic. chir., 1839, p. 155, poisoning of three persons; **360**, Dr. Deville, Revue méd., 1838, 355, a woman took 3 grams; **361**, Tardieu, poisoning; **362**, Dr. Martineau, communication to Soc. méd. des Hôp., effects on a man; **363**, Ann. d'hyg. et de méd. leg., 1847, 400, poisoning; **364**, Dr. Lachese fils, Ann. d'hyg., publ. et de méd. leg., 1re ser., t. 17, five persons were poisoned by soup; **365**, same, case of a woman; **366**, *ibid.*, t. 37, p. 121; **367**, Dehesne, Journ. de Van der Monde, 1759, 330, poisoning; **368**, Mean, Bib. méd., 1821, 401, application to the feet; **369**, Desgranges, Rec. de la Soc. de méd. de Paris, t. 6, p. 22, application of arsenical pommade to the hair; **370**, Belloc, Méd. leg., t. 4, p. 124, a woman applied a solution to the whole body; **371**, Dr. Vernois, Ann. d'hyg. et de méd. leg., 1846, application of a preparation to a tumor; **372**, Dr. Vitry, *ibid.*, application of a preparation of Arsenic; **373**, Dr. Netolitzky, Prag. Med. Wochn., 1876, 225 (S. J., 171, 138), a woman poisoned by a large dose; **374**, Eduard Renner, Ueber einen Fall von chron. Arsen- giftung, Würzburg, 1876; **375** and **376**, E. W. Berridge, Am. Journ. of Hom., Mat. Med., New Ser., vol. v, p. 427, poisoning of two children by wall-paper; **377** to **384**, F. H. Brown, M.D., Bost. Med. and Surg. Journ., vol. xciv, 529, cases of similar poisoning; **385**, H. B. Donkin, M.D., Brit. Med. Journ., 1876 (2), 587, similar case; **386**, A. P. Bowie, M.D., Hahn. Month., vol. xii, p. 490, John Adams swallowed $\frac{1}{4}$ oz. dissolved in water; **387**, J. H. Finley, M.D., New York Med. Journ., vol. xxvi, 1877, p. 401, poisoning of sixty men; **388**, Dr. Ussher, Hom. World, vol. xii, p. 536, Mrs. S. poisoned by wall-paper; **389**, same, other cases of poisoning; **390**, M. Saint Philippe, Gaz. méd. de Par. (Lond. Med. Rec., 1878, 215), one patient took 16 grs., and another 64 grs.

Mind.—Delirium,^{358 359 366}—Occasional delirium,³⁶⁹—Loss of reason from time to time,³⁶⁷—Previous to death the patient became delirious and restless,³⁶⁸—Slight night delirium,²⁹⁰—Delirious and unconscious,²⁸⁹—Became very nervous, agitated, and delirious, suspecting people were about the house plotting against his life, jumps out of bed suddenly and reaches after imaginary objects, and stares wildly and suspiciously around him, and at every one who makes the slightest noise or stirs; is incoherent,³³⁴—[2880.] Within two hours she was found sitting up in a chair, tossing her arms about, apparently perfectly unconscious of surrounding objects and events. She seemed to be suffering from hysteria. In half an hour she was able to speak,²⁵³—He pointed out to his sister a hollow between his breast and belly, into which “she could have laid her arm,”²³⁸—Much excited and crying (after one hour),²⁶³—Much mental and bodily agitation,²³⁶—His head seemed very much affected, so that he scarcely knew what he said or did, and seemed to labor under a kind of insanity,²²⁷—When spoken to she turned away her head, and was silent,³⁰⁹—Symptoms of intoxication immediately,³¹³—Arsenic-eating makes men lively and combative,³²⁹—Feeling of impulsiveness,³⁰⁸—Remarkable watchfulness,³¹⁷—[2890.] Great dislike and indifference to those around,²⁹⁶—Extreme oppression,³¹⁵—Great depression and want of interest in anything,³¹⁴—“The

whole head sick, the heart faint;" she awoke in the morning wretched, her life a burden, weariness the day's portion, and each succeeding day like its predecessor, unless physic helped her with its little aid.³⁶⁸—Extreme anxiety.³⁶¹—Great personal anxiety.²⁶⁷—Anxiety as regards some persons.²⁹⁶—Her easy-going natural temper was altered; she was irritable in spite of herself, and the same demon had taken temporary habitation in a sister and brother-in-law.³⁶⁸—Morose and sullen till convalescent, which was in twelve or fourteen days.³¹²—Intellectual excitation.³¹⁷—[2900.] Seemed at times hardly able to collect her thoughts.³⁰²—Memory enfeebled.³⁵⁴—Lying down, apparently insensible; on being roused began to be sick (after two hours).²⁶³—Insensible (after nine hours).^{293 346}—Coma.³⁵⁸

Head.—Vertigo.^{259 289}, etc.—Vertigo, with inability to keep erect.³⁶⁴—Dizziness in the head (after five minutes); great swimming in the head and vertigo (after ten minutes).³⁴⁶—Head swollen.³⁶⁹—Head on one side, and pain on raising it, as from a rheumatic affection of the sterno-mastoid.³²⁶—[2910.] Cerebral congestion on the third day, just before death.³⁵¹—Sensation of heaviness in the head.³⁵⁸—Headache.^{251 268}, etc.—Severe headache.^{264 359}, etc.—Constant headache.²⁹⁷—Severe pain in head and across eyes (one case).²⁸⁵—Complained of pain in head, breast, and belly, vomited several times, and was very thirsty.²⁴²—She complained of a "queerness and strange feeling in her head." These symptoms had come on suddenly, and lasted about ten days. Loss of memory of the performance of very recent acts, frequent giddiness, and some drowsiness, were the chief expressions of the "queerness" she alluded to. She felt as if she were "losing her mind."³³⁸—Pain over brows.³²⁶—Violent pain in the frontal region, with vertigo.³⁶⁰—[2920.] Violent neuralgia of forehead and face.³⁰¹—Falling out of the hair.³¹⁴—Falling of the hair during convalescence.³⁶⁹—The hair on the head was thick only on the middle of the skull, and the skin desquamated freely.³⁷⁴

Eye.—Dark areolæ round eyes.²⁸⁹—Livid circle round eyes.²⁷⁹—Dark areolæ round eyes and mouth.²⁶⁷—When near death dark areolæ around eyes.²⁶⁸—Dark areolæ around eyes, which are somewhat staring.³⁴¹—Eyes sunken.³⁴¹—[2930.] Eyes hollow, when quite half closed.³⁰⁹—Eyes hollow and dark round eyelids.³⁰⁸—Hollow, sunken eyes.³⁰⁷—Lustrous glistening eye.³³⁶—Eyes injected.^{281 347 372}—Eyes red, lids swollen and excoriated; the redness and swelling of the lids lasted several days.³⁶⁷—Scalding of eyes.²⁸⁵—During the week she had soreness of the eyes.²⁴⁹—Soreness of eyes, which looked inflamed.²³⁸—Soreness and irritability of eyes; during the second attack the conjunctiva of lids was deep red along the tarsal edges and at the angles; the lids were slightly tumid, and had a tendency to eversion; vision was painful.³¹⁴—**Lids.** [2940.] Swelling of eyelids.²⁶⁹—Lids oedematous (second day).³⁷³—A line of excoriation on integument at external angle of each eye, and desquamation of cuticle of eyelids, with redness of latter.²⁶⁹—Slight inflammation of left upper eyelid.²⁴¹—Convulsive movements of the eyelids, jaws, etc.³⁵⁸—Itching about eyelashes.²⁸²—**Lachrymation.** Lachrymation.²⁶⁹—Lachrymation, which corroded the lids and cheeks.³⁵⁷—Eyes suffused, even bloodshot.³⁴⁶—**Conjunctiva.** Conjunctivitis for a considerable time.³⁶⁹—[2950.] Slight conjunctivitis, with intolerance of light.²⁶⁴—Mild conjunctival inflammation.²⁶⁵—Inflammation of tarsal portions of conjunctiva.³¹⁵—Injected conjunctiva.^{266 270 313}—In all the conjunctivæ were injected; the next day, except in the children, the congestion had disappeared, and given place to a yellow tinge.³⁴⁴—Conjunctiva

bluish white,³⁷⁴.—Suffusion of conjunctiva,²⁷³.—**Pupil.** Pupils dilated (after several days),³⁵⁴.—Pupils dilated, but react normally to light,³⁷⁴.—**Vision.** Dimness of sight,^{239 262}, etc.—[2960.] Failure of vision,^{270 279}.—One girl, æt. fourteen years, became blind, lost her speech, and fell down in a state of syncope,³⁴¹.—Flickering before the eyes,³⁷⁴.—Some complained of flickering of the muscles and disturbance of vision, preventing them from knitting, sewing, or reading; and when they closed their eyes they saw shining particles floating backwards and forwards (second day),³⁴⁴.—Sparks before the eyes (second day),^{373 374}.—Bluish sparks before the vision,³⁷².

Ear.—Ringing in ears,²⁹².

Nose.—Long-continued excessive watery discharge from the left nostril, saturating handkerchiefs by the dozen, excoriating the nose, and making her wretched,³⁹⁶.—Nosebleed,³⁶⁶.—Profuse epistaxis,^{354 368}.—[2970.] Tip of the nose violet, cold,³⁶².

Face.—Anxious countenance,^{270 300}, etc.—Cadaverous countenance,²⁸⁹.—Features pinched; eyes sunken,^{322 349}.—Features pinched, livid,³⁶².—Features contracted and face thin,³²⁸.—Sunken countenance,^{279 280}.—Face sunken and ghastly,²⁴⁵.—Complexion unnatural, and by gaslight a dark greenish hue,³⁴⁸.—Pallor of the face,^{354 373 398}.—[2980.] Face pale, pinched, covered with cold sweat,³⁵⁶.—Face pale, contracted, and anxious,²⁸⁴.—Face pale, collapsed,³⁴⁸.—Flushed face,²⁷³.—Face red,^{347 358}, etc.—Easily flushed,³⁷⁶.—Much suffusion and some swelling of face,²⁶⁶.—Face red and swollen,³⁶⁰.—Countenance dusky,³³⁴.—Face livid,³⁴¹.—[2990.] Countenance livid and sunken (after six hours),²⁶².—Face puffy and erysipelatous,³⁶⁹.—Twitching of face muscles,³²⁴.—Convulsive movements of the muscles of the face,³⁵⁷.—Neuralgia; often have I found this lady with her face closely wrapped up in flannel, as if she dreaded an attack with sharp ice-spears or burning needles; it came with throes of violence over the left eyebrow, and into the bones of the face, crept up the spine, and settled in the vertex, making her feel as if she could go mad, or rush out anywhere; noise was intolerant,³⁶⁸.—Lips violet, cold,^{341 362}.—Lips parched and dry,²⁹⁴.

Mouth.—**Teeth.** Sordes on teeth,²⁷⁰.—Teeth of a yellowish-carthy look, with very little lustre,³⁷⁴.—**Gums.** Spongy gums,³⁰¹.—[3000.] Aphthous ulceration of gums and tonsils,³⁰¹.—Gums swollen and sore (second day),³³⁰.—Gums inflamed,²⁹⁵.—The gum exhibited a red line,³⁷¹.—Tenderness of gums,²⁶³.—Burning in gums,²⁷⁵.—**Tongue.** Tongue swollen,³⁴⁶.—Tongue foul and swollen,²²⁷.—Tongue large, somewhat indented, covered with a true silvery-white fur, the papillæ projecting through it of rather a dark-red color,³²⁵.—Tongue thick, fleshy, clean,³⁷⁴.—[3010.] Drew her tongue together as much as alum does,³⁴⁵.—Tongue loaded,²⁸¹.—Tongue much furred,²⁵⁰.—Tongue moist and covered with a thin white fur,³²⁸.—Whiteness of tongue,^{271 331}.—White tongue, with red tip,²⁶⁶.—Tongue coated white, with red margins, and painful,³⁵⁰.—Tongue red and dry,³⁵⁵.—The tongue presents red edges, with white fur,²⁹⁵.—Tongue coated white, with scattered red papillæ, resembling the tongue of scarlatina,²⁸¹.—[3020.] Tongue and fauces very red (second day),³³⁰.—Tongue and whole mucous membrane of the mouth and pharynx intensely red,³⁵⁵.—Bright green coating of the tongue (one case),²⁷⁸.—Tongue had a dryish coffee-brown coloring, later changed to an inky color, the substance of the organ being injected,²⁹⁰.—Tongue dry and brown,³⁶⁶.—On the fifth day the tongue became dry and black, the ecchymosed spots on the skin became dry and black,³⁶⁸.—Tongue dry,^{357 369}.—Tongue cold,³⁴¹.—Burning in tongue,²⁷⁵.—Sensation on the tongue as though there were blisters on it,³⁷⁴.—**General Mouth.** [3030.] Aph-

thous ulcerations on mouth and tongue,²⁴⁶.—Stinging sensations in mouth and pharynx (after a quarter of an hour),²⁷².—Burning heat in the mouth and anus,³⁵⁵.—**Saliva.** Ptyalism,^{291 373}.—Unusual degree of salivation,²⁸⁷.—He spat very much,²²⁷.—Free secretion of saliva, as if salivated (second day),³³⁰.—**Taste.** Burning astringent taste in the mouth,³⁷².—One complained of a nauseous taste (second day),³⁴⁴.—Sooty taste in mouth,²⁸².—[3040.] He had had a metallic taste in mouth and throat for some time,³²⁵.—Strong metallic (coppery) taste in mouth,³³⁴.—Speech monosyllabic, tremulous,³⁷².

Throat.—Spasms in the throat,³⁵³.—Dryness of the throat,³⁷¹.—Dryness of throat and tongue,²⁹⁷.—Diphtheritis,³⁰¹.—Sore throat,³⁷⁶.—More or less sore throat for three years,³⁵².—Constriction of throat,^{298 271}, etc.—[3050.] Painful constriction of the throat,³⁵¹.—Slight sensation of constriction in throat,³¹⁷.—Sensation of strangling in the throat,³⁵⁶.—Scraping in the throat,³⁷⁴.—Roughness of throat (one case),⁷⁷⁸.—Husky feeling in throat,³¹⁴.—Burning in throat,²⁴⁸.—Sensation of burning in throat,³⁷⁴.—Severe burning pain in throat,²⁶⁴.—Two observed that they had burning in the throat (after five to seven minutes),³⁵².—[3060.] Heat in the throat and stomach,³⁶⁰.—Heat and uneasiness of throat, with hoarseness,²³⁸.—Soon after his occupancy of the room, began to have tonsillitis, with dry tongue and mouth, and finally these symptoms continued through nearly the entire winter; he increased very markedly in weight, became dyspeptic, and had a foul breath, with a general sensation of malaise,³⁷⁵.—On palate and uvula were small, roundish, white, acuminate prominences; seemingly the membrane covering the palate, bones, and velum pendulum detached at the parts by a whitish liquid,²³⁸.—Redness of fauces with aphthous ulceration,²⁶⁹.—Uneasiness in fauces,²⁶⁶.—Spasmodic contraction of pharynx,^{291 296}.—Constriction of œsophagus,^{271 282 330}.—Burning in tract of œsophagus,^{269 334}.—Simple ardor in œsophagus extending to stomach, but seldom painful when the dose is not considerable,³¹⁷.—[3070.] Dysphagia,²⁴⁸.—Deglutition very painful on account of the spasmodic constriction of the throat,³⁵⁵.

Stomach.—Appetite and Thirst. The increase of appetite is remarkable, and is almost always observed when the dose is weak. A strong dose produces opposite effects, such as diminution and even complete loss of appetite, nausea, and vomiting,³¹⁷.—No appetite,²⁵⁰, etc.—Appetite there was none; eating became a forced business,³⁵⁸.—Great loathing of stomach,²⁶⁵.—Loathing of animal food,³⁴⁸.—Thirsty,^{264 265}, etc.—Excessive thirst,^{270 289}, etc.—Tormenting thirst,^{336 345}.—[3080.] Intense thirst, with constant desire for cold water, which even in the smallest quantity could not be retained,³²⁸.—The thirst is more excessive in proportion as the quantity of Arsenic taken is greater,³¹⁷.—Pyrosis,²⁹¹.—Heartburn,²⁴⁰.—**Nausea and Vomiting.** Nausea soon,²⁶⁹.—Desire to vomit,²⁹⁰.—Five centigrams Arsenious acid taken at supper caused nausea and headache the following morning, with slight diarrhœa, all of which disappeared in the course of the day,³¹⁵.—Nausea, followed by vomiting of green bilious matter, and ropy mucus, continuing for thirty hours,²⁶⁹.—Nausea (after three hours); frequent violent efforts to vomit, though nothing was discharged (after five hours); incessant vomiting for two hours (after six hours),²⁹³.—Nausea and vomiting,³⁵⁸.—[3090.] In an hour she was constantly retching, and sometimes vomiting, with violent spasms of stomach and bowels; weak and quick pulse; frequent dark bloody diarrhœa; frequent coldness of extremities. The next day she complained of soreness of stomach,³²⁹.—Nausea and flow of viscid saliva from the mouth, with heat of fauces, stupor, small and frequent pulse (after forty minutes),³⁷².—In about an hour he

had nausea, feeling of distension of stomach, with great pain, as if there were a fire within him, burning in mouth, and subsequently vomiting of a greenish fluid; to these were speedily added burning in throat and along œsophagus, urgent tenesmus, with slight discharge of mucus, excoriation of anus. During the latter part of his illness he had bloody discharges from his stomach,²⁷⁰.—Terrible efforts to vomit, which were unsuccessful,³⁶⁶.—Slight distress in the stomach (after five minutes); retching, with slight vomiting (after ten minutes),³⁴⁶.—Vomiting,^{268 290}, etc.—Vomiting and purging,^{229 352}.—Vomiting and diarrhœa, followed by collapse,³⁷³.—Pain and vomiting,²⁸⁹.—Vomiting (after some hours); vomited matter pinkish,²⁹².—[3100.] Drink immediately rejected,²⁶⁵.—Persistent vomiting,³⁴¹.—Vomited severely,^{307 312}, etc.—Severe vomiting, almost immediately,²⁷¹.—Intense vomiting and thirst,³³¹.—Vomiting, lasting till death,^{272 309}.—Chronic vomiting,³³⁶.—Became very sick, and vomited frequently; occasionally vomited blood,²⁹⁸.—After a drink of milk, or a severe fit of vomiting, she fell back in bed utterly prostrate, and after lying quiet for a time began to toss about her legs and arms, to complain of much pain and sickness, which ended in vomiting and prostration as before,³⁰⁶.—Sudden and violent vomiting, terminating in abortion, and afterwards death,²⁵³.—[3110.] Vomiting was attended with much anxiety and great prostration of strength, and a sensation of tightness at throat,²⁴⁸.—Vomited a great deal, particularly when she drank anything,²⁴⁵.—Spontaneous vomiting set in immediately, whereby much of the poison was thrown off,³³³.—Vomiting for many hours, during which time she was very prostrate. Nothing would lie on her stomach; she continued to vomit a greenish matter, streaked with blood,³³².—Vomited half-digested food,²⁶⁴.—Sudden vomiting of food, mixed with bile,³⁷⁴.—Found him lying on the bed with a basinful of watery, frothy fluid near him, which he had just thrown up. He had begun to vomit in ten minutes after swallowing the water, and it had continued till now (nearly two hours). Nothing would stay on his stomach; water being thrown up immediately after swallowing. The vomiting was painless,³⁸⁶.—Vomiting of glairy fluid, in the morning,²⁹¹.—Vomiting of glairy substances tinged with blood,³⁶⁷.—Vomiting of mucus in the morning, with increased secretion of saliva,²⁹⁶.—[3120.] Vomited two or three times a yellowish fluid (after six hours),²⁶².—Frequent vomiting, watery and bilious,³⁶¹.—Repeated bilious vomiting,³⁷².—Vomiting at first bilious, then bloody,²⁷³.—Vomiting streaked with blood,²⁹⁷.—Bloody vomiting,²⁶⁶.—Frequent bloody vomiting,³⁷¹.—In one case a few drops of blood were vomited,³⁴⁴.—Blood appeared in the matters vomited and evacuated by the bowels,³⁶⁸.—Vomited repeatedly a reddish sort of matter,²³⁹.—[3130.] Green vomiting,²⁷⁶.—Vomiting on drinking; vomiting green,²⁶¹.—Vomiting, latterly of a green insoluble bile,²⁷⁷.—Vomited matters of a bright grass green,³²⁵.—Persistent vomiting of green matter,³⁶².—Vomited matters were a brownish watery fluid, which became green on standing,²⁹⁰.—**Stomach.** Mucous membranes generally pale and anæmic,³⁷⁴.—Indigestion in various forms,²⁹⁶.—For three or four weeks had had dyspeptic symptoms, and frequently had pain after meals, and could use little else than oatmeal porridge or other light farinaceous food,³²⁰.—Gastritis rapidly increasing, collapse, and death thirteen hours after the poisoning,³³³.—[3140.] Cardialgia,^{358 369}.—Violent gastrodynia,^{291a}.—Stomatitis (third day),³⁶¹.—Considerable tenderness on firm pressure on the epigastrium (after five hours),²⁹³.—Tenderness at epigastrium and upper part of abdomen (after second day),³¹².—Stomach and abdomen tender and painful to touch,³³².—Slight tenderness of epigas-

trium,²⁷³.—Sensitiveness of the epigastrium,³⁵⁹.—Epigastrium painful to pressure,^{372 373}.—General distress in the stomach, followed by nausea and vomiting,³⁶⁴.—[3150.] Burning pain in stomach,^{273 334 361}.—Severe burning pain in stomach,²⁶⁴.—Sense of burning extending from pylorus to throat,²⁹⁶.—Burning pain in epigastrium and over upper part of abdomen, especially when pressed,³⁰⁸.—Burning pain in the stomach (after five hours); increased (after six hours),²⁹³.—Burning pain in the stomach (after half an hour); increased burning in the cardiac portion of the stomach (after three hours),³³⁰.—Burning in stomach, great tenderness of epigastrium, and cramps,²⁷⁹.—Dreadful burning in the stomach, with a great deal of thirst,³⁸⁶.—In ten minutes she became very sick. During the night there was much burning pain in the stomach. Pain in stomach and bowels, and slight tenderness; more tenderness at the large end of stomach than at any other part of abdomen,²⁵⁰.—Smarting pain in the stomach,³²⁵.—[3160.] Sensation of coldness at pit of stomach,²⁸⁶.—Heat in stomach, throat, and mouth,²⁴⁷.—Excessive heat in the stomach, and burning like fire,³⁶⁴.—Sensation of fulness at stomach,²⁹¹.—Constant feeling of the stomach being overloaded,²⁹⁶.—Constant feeling of the stomach being overloaded at early morning,²⁸⁷.—Spasmodic pain, writhing, twisting about, moaning, and making strange faces. On arriving at the house, found her more free from pain, but with a sensation of burning heat in throat and stomach,²⁵⁵.—His stomach seemed to jump, and severe pain, with vomiting ensued. The matter vomited was fluid, apparently the water he had drank, and it relieved him. The pains soon returned, however, and were very acute over the whole belly,²⁵⁰.—Pain in stomach,²⁶³.—Pain in stomach when she drank,²⁸².—[3170.] Pain on pressure over stomach,²⁶⁴.—In three days he had pain in stomach. On continuing the applications it became excessive; convulsive tremor of the muscles followed, and he died. The stomach was found to be in the highest degree inflamed,²³⁷.—Pain and heat in region of stomach and lower part of chest,²³⁸.—Violent pain in the epigastrium and chest,³⁵⁴.—Violent pain in the epigastrium, aggravated by pressure,³⁴⁷.—Extremely acute pain in the stomach,³⁵².—Intense pain in region of stomach, not materially increased by pressure,³²⁸.—Constriction of the epigastric region,³⁴¹.

Abdomen.—Sensation of a bar around the flanks,³⁴⁸.—Inclined to lie on abdomen,³⁸⁶.—[3180.] Abdomen distended,^{347 356}.—Abdomen much swollen and tympanitic,³²⁸.—Abdomen distended, painful,³⁴⁹.—Abdomen meteoric, painful,³⁵⁵.—Tympanitic belly,²⁷⁹.—Abdominal muscles tense, outline distinct; firm pressure excited a little pain in right hypochondrium,²⁹⁰.—Abdomen retracted, not painful,³⁶².—Abdomen retracted,³⁴¹.—Mucous derangement of bowels and colic,³¹⁵.—Increased contractility of intestine and stomach; increased peristaltic action of intestines,³¹⁷.—[3190.] Abdomen tender on pressure, and somewhat distended,²⁸⁹.—Abdomen painful, tender,³³⁷.—Occasional uneasiness in abdomen, and sometimes ineffectual efforts to go to stool,²³⁸.—Colic,^{336 361}.—Constant colic,²⁵¹.—Dull griping pain in bowels,³⁴³.—Bowels griped and moved freely,²⁶³.—Griping pains,²⁹⁶.—Very violent pain in the abdomen, especially in the epigastric region,³⁷⁴.—Abdominal pain and tenderness to touch,³⁰⁷.—[3200.] Pain referred to the upper abdomen, but not much increased on pressure,³⁰⁹.—Pain and tenderness over entire abdomen (after three hours),²³⁰.—Dreadful pains in belly,²⁹⁰.—Violent burning pain in the abdomen,³⁴⁵.—Severe burning pain in bowels,²⁶⁴.—Severe burning pain in whole bowels, but particularly in the side,²⁴⁵.—Burning heat in the intestines,³⁵⁸.—Smarting pain in the bowels,³²⁵.—Cutting pains through the bowels (second day),³³⁰.

Bectum and Anus.—Peculiar feeling of smarting and pain at the end of the rectum; inclination to evacuate, but not at all of the nature of tenesmus,²³⁶.—[3210.] Tenesmus,^{240 275}. •

Stool.—***Diarrhœa.*** Diarrhœa,^{251 262}, etc.—Tendency to dysenteric diarrhœa,³⁸³.—Frequent diarrhœa,³⁴³.—Purging; the stools were inodorous and unhealthy,²⁴⁸.—Diarrhœa occurred in two women, one of whom had taken a purgative the previous morning (second day),³⁴⁴.—Diarrhœa, with great prostration of strength,³⁰⁷.—Stools, which weakened him so much that he felt himself fainting. He could not get into bed again, his legs trembled, and his weakness was extreme. The weakness in both men was relieved by white wine,²⁵⁹.—Painless, watery diarrhœa, greenish color,³⁸⁶.—Involuntary stools, serous and corroding, as if there were burning fire at the anus,³⁵⁷.—[3220.] Purging (after some hours); stools a white curdy fluid,²⁹².—Alvine evacuations,^{347 351}.—Stools very numerous,²⁶⁵.—Two thin stools a day,³⁶⁶.—Profuse liquid stools,³⁷².—The stools are more frequent and less consistent, but this seldom, if ever, becomes changed into true diarrhœa, and more rarely still into dysentery,³¹⁷.—In two instances, one of them in my own household, it is credited with dysentery; and bloody stools in three cases,³⁸⁹.—Bloody purging and tenesmus,²⁷⁶.—Bloody stools,³⁷².—Bloody evacuations from the bowels,³⁷¹.—[3230.] Watery, greenish, involuntary stools (after six hours),²⁶².—Frequent green stools,³⁴⁹.—Stools frequently thin, with grumous particles,³⁴¹.—Stools black and solid (third day),³⁶¹.—***Constipation.*** Stools dry, and only every few days,³⁷⁴.—Frequent calls to stool, with discharge of small quantities of a brick-red fluid (one case),²⁷¹.—With the exception of one minute portion of very hard feces, nothing was evacuated till the sixth day, when she took a dose of castor oil, after which her bowels were natural,²⁴⁰.—Constipation,^{229 296}, etc.

Urinary Organs.—Violent pains in the kidneys, bladder, and penis,³⁶⁷.—Urethritis,³⁹⁰.—[3240.] Frequent efforts to urinate,³⁶⁷.—Urinated frequently,²³⁸.—Frequent urination, pain in bladder,²⁷⁰.—Difficult micturition, but without pain. After eight months the impediment on urinating still continued,²⁶⁹.—Micturition very difficult and painful (third day),³⁶¹.—Urinated with pain, urine being red (fourth day),²³⁹.—Pain in urination,²⁸⁴.—Urine is more abundant and more frequent. This increased secretion of urine alternates with the cutaneous transpiration, and is the more considerable the drier the skin is,³¹⁷.—Scanty urine,^{295 328}.—Urine very scanty (second day),³⁷³.—[3250.] Suppression of urine,^{293 345 348}, etc.—Suppression of urine; a very small quantity was drawn by the catheter, tested by Fehling's liquid, was found to contain sugar,³¹¹.—Urine scanty, and depositing lithate of ammonia,²⁸¹.—Urine high-colored and scanty,³⁰².—Bloody urine,²⁸⁴.—Urine at first red,³⁴⁵.—A very small quantity of urine was drawn by the catheter, giving with Fehling's liquid the characteristic reaction of glycosuria.³⁶²

Sexual Organs.—Excessive swelling and intolerable pains in the penis, with violent efforts to urinate,³⁶⁷.—Frequent priapism,²⁷⁰.—Arsenic-eating causes strong sexual desire,³²⁹.—[3260.] He thought the genitals had been excited by the Arsenic,³²⁸.—Premature delivery,²⁸⁹.—I can trace to it miscarriage and flooding, uterine suffering, which gave way when the cause was removed,³⁸⁹.

Respiratory Organs.—Bronchitis, which yielded slowly,²⁸⁵.—***Voice.*** Thickness and roughness of voice,^{291a}.—Hoarseness,^{269 270}, etc.—Voice hoarse, toneless,³⁷⁸.—Voice feeble,³⁴¹.—Voice weak and low,³⁰⁹.—Voice trembling,³⁵⁷.—[3270.] Voice faint,³⁰⁸.—Voice lost (after several

days),^{354 362}.—**Cough and Expectoration.** Cough,²⁹⁴.—Short cough,³⁷⁶.—Short, dry, hacking cough,³³⁶.—On the day before death there were cough and muco-crepitant râles (without dulness) in posterior part of lungs,²⁷⁷.—Cough, worse at night, caused by tickling in throat, worse on speaking, causing pain in abdomen, with green expectoration,³⁷⁶.—Cough, especially in the morning, with expectoration of slimy purulent masses, but rather scanty,³⁷⁴.—Cough, with yellowish expectoration, and bronchitic râles in chest,²⁶⁹.—**Respiration.** Respiration hurried,³³⁴.—[3280.] Respiration 25 per minute (after five hours); 30 (after six hours); more labored and rapid (after ten hours); ceased entirely (after twelve hours),²⁹³.—Breathing quick and audible,²⁶⁰.—Respiration slow,³⁶².—Shortness of breath,^{294 327}.—Respiration labored, sighing,³⁵⁷.—Difficulty of breathing,^{240 291}, etc.—Difficulty of breathing, which lasted till death,²⁷⁶.—The breathing becomes more facile, and is accompanied with a certain feeling of comfort,³¹⁷.—Dyspnoea,²⁹⁵.

Chest.—The pectoralis muscles seemed wasted, so that the chest had a peculiar sunken appearance,³⁷⁴.—[3290.] Some oppression of chest, with difficult breathing,²³⁶.—Tightness and dryness of chest,²⁷¹.—Complained of symptoms of the lungs, which were found to be congested,³²⁴.—Sensation of weight upon the chest,³⁵².—Violent pain in the chest and stomach,³⁶⁷.—At first talking caused pain to shoot upwards on sides of thorax,²⁹⁰.—Smarting pain in the chest, along the sternum,³²⁵.—Shock in the apex of the right lung, with a somewhat higher percussion-sound than in the left; auscultation there was increased, vesicular murmur, and large and fine moist râles; the cough and expectoration disappeared after a few days, when no more signs were noticed in the right lung,³⁷⁴.—Pain in the right side of the chest,³⁷².

Heart and Pulse.—Very decided *bruit de souffle* of the heart (eighth day),³⁵⁹.—[3300.] Tumultuous beating of the heart, but no pulse,³⁴⁸.—Heart's action quick and faltering (after five hours and a half),²⁹².—Action of the heart rapid, feeble, with no pulse at the wrist,³⁶².—Action of the heart feeble and irregular,³⁵⁵.—Palpitation,³²⁷.—Severe palpitation,^{295 373}.—Pulse quick,²⁶⁰.—Pulse very rapid and nearly imperceptible,³⁰⁸.—Pulse rapid and extremely feeble (after six hours),²⁶².—Pulse rapid and irregular,^{355 357}.—[3310.] Feeble, rapid pulse,²⁸⁹.—Pulse 160 and very weak,²⁹¹.—Pulse above 120, rather unequal,²³⁶.—Pulse 120 to 130, but not hard,²⁶⁰.—Pulse thready, 120 to 130, and in two somewhat intermittent,²⁸⁴.—Pulse 120, soft, a little jerking (second day),³²⁵.—Pulse 110, regular, but soft and weak,³²⁸.—Pulse 100, full and compressible; afterwards quick and fluttering; latter weak,²⁶⁴.—Pulse 100 and weak,²⁵⁰.—Quick, small pulse,^{273 307}, etc.—[3320.] Quick, wiry pulse,²⁷¹.—Pulse quick and somewhat jerky at first, but lowered in power and frequency,³³¹.—Pulse hard, feverish,³⁶⁰.—Pulse slightly accelerated (after three hours); 126 and wanting in volume (after five hours); 130 and feeble (after six hours); ceased at wrists (after ten hours),²⁹³.—Pulse became more full and frequent, but sank again, and only beat with greater force and frequency when the dose was increased,³¹⁷.—Pulse full and strong,³⁴⁷.—Pulse very weak,²⁶⁵.—Feeble pulse,^{258 350}.—Pulse small,³⁷.—Pulse became small and thready,³⁵⁵.—[3330.] Pulse small, irregular,³⁵².—Pulse very irregular,³⁶⁵.—Pulse 50 and soft (after half an hour); small and thready (after three hours),³³⁰.—Nearly pulseless,³¹².—Pulse imperceptible at wrist or temple, and felt over the heart to be beating faintly 150 a minute,²⁴⁵.—Pulse imperceptible (after five hours and a half),^{292 346}.

Neck and Back.—Complete extension of the hand was not wholly possible and was painful,³⁷⁴.—Pains in the back,³⁷⁴.—Intense pain in back,³⁴⁴.

—Acute tearing pains in the lower portion of the spine,³⁶⁵.—[3340.] Pain in loins,^{275 286}.

Extremities.—In two cases within my knowledge the nails altered color and peeled off,³⁶⁹.—The nails were of a dirty yellowish-brown color, with longitudinal furrows and cracks,³⁷⁴.—Nails livid, violet,³⁶².—Swelling of limbs,²⁵¹.—The muscles of the upper and lower extremities were atrophic,³⁷⁴.—Arms and legs paralyzed, with violent pains in muscles and in bowels,²²⁷.—The upper and lower extremities became paralyzed, first noticed after five weeks; on attempting to rise from bed her legs gave way; and she was unable to rise without assistance,³⁷⁴.—Extremities rigid and painful, with spasms,³³⁴.—Occasional spasmodic twitchings of muscles of limbs,³⁰⁸.—[3350.] Trembling of the limbs with the attack,³⁷⁰.—Limbs tremble, cannot support the body,³⁶⁹.—Excitement of muscles of extremities,³¹⁷.—Constant agitation of the hands and feet,³⁵².—Threatened paralysis of both arms and right side and leg,³⁶⁸.—The flexor muscles of the four last fingers of each hand and of all the toes were in a state of contraction, and the two last phalanges were flexed upon the first, and the balls of the fingers and toes rested upon the palms and soles, on account of which the patient walked with great difficulty,³⁶⁵.—Almost complete loss of power in the extremities, more of the left side, without loss of sensibility (seventh day),³⁵⁹.—Lassitude in the extremities,³⁶⁴.—Remarkable insensibility of hands and feet,²⁴⁸.—Numbness and pain in arms and legs,²⁴¹.—[3360.] Tingling in limbs,²⁸².—Legs and arms feel as if something were gnawing them,²⁵⁰.—Cramps in the limbs,^{341 348 354}.—Pains in limbs,²⁵⁰.—Acute pains in limbs,³⁶⁴.—Shifting pains in extremities, particularly in the arms, which had not their usual strength,²³⁶.—Seven months before her death she had a violent attack of neuralgia of the shoulder, which afterwards extended to both groins, the thorax, and back; this was relieved for a time, but continued with most agonizing severity; the abdomen became enormously tympanitic; muscular paraplegia slowly ensued, and she died,³⁰⁵.

Superior Extremities.—Arms in constant motion about head, as if picking at something above the head,²⁶⁰.—Painful tumefaction of the right arm and hand,³⁶⁷.—The arms and hands became sore, and mortified and sloughed,³¹⁶.—[3370.] Pain in the arms, particularly the left, of which he had in some degree lost the strength (after six days). The motions of the hands are much less impaired than those of the arm and forearm; in particular the power of bending the forearm on the arm is almost entirely lost,²³⁹.—Tingling sensation in axillæ for eight days,²⁶⁹.—Subsultus tendinum,^{282 354}.—Neither extension nor flexion of the hand was complete,³⁷⁴.—The interosseous spaces in the dorsa of the hands were deep furrows; the hands looked as though they belonged to a skeleton; the palms formed deep concavities,³⁷⁴.—Finger clenched,³⁵².—Most remarkable was the complete immobility of the fingers, which were flexed on their two first phalangeal joints, forming an incompletely closed fist,³⁷⁴.—Feeling of fuzziness in the fingers, extending up the arm, ending in complete loss of the sense of touch,³⁷⁴.

Inferior Extremities.—Paralysis of the inferior extremities,³⁵⁸.—Complete paralysis of the lower extremities,³⁶⁴.—[3380.] In one case, which recovered after the lapse of a month, there were partial paralysis of lower extremities and desquamation of cuticle,²⁷³.—In the lower limbs the muscles of the thigh were feeble and soft, and the calf formed only a flabby bundle of fibres; the foot of the patient remained in an extended position, so that the back of the foot formed a line with the spine of the tibia, while

at the same time the inner margin of the foot was turned somewhat inward and upward, and the plantar surface looked inward and backward; the instep formed an angle with the tibia directed inward and forward, and the articulations of the ankle and foot were weak, and on flexing the leg the foot could be moved in a very loose manner; the toes were also flexed and motion very much restricted,³⁷⁴.—Lower extremities cold, stiff, and without the power of motion (second day),²²⁹.—Hyperæsthesia of the lower extremities; the slightest touch caused cries from the patient (after several days),³⁰¹.—Curious sensation in her lower limbs (one case),²⁶⁰.—Violent pains in the lower extremities,³⁷².—Pain in knees,²⁶⁶.—Paralysis of legs,²⁸².—The sharp prick of a pin had no effect on the left leg, and a hard pinch was requisite to excite motion in the right,³⁰².—Spasms in legs,²⁶⁵.—[3390] Contraction of the extensors of the legs,³⁰³.—Such a weakness in his legs that he with difficulty got into bed,²⁵⁹.—Want of strength in her feet and legs (sixth day); a few days afterwards she had swelling of feet, with numbness and creeping in inferior extremities,²⁴⁰.—Cramp in one leg (in four hours),²²⁹.—Much cramp in legs,²⁷².—Painful cramps of legs,²⁹⁰.—Cramps in the legs (after five hours); increased (after six hours),²⁹³.—Muscular soreness of legs (after three hours),³³⁰.—Cramps in the calves,³⁶⁰.—Violent and increasing cramps in calves,³³⁴.—[3400.] A feeling of hot water running down the calves from knee to ankle, lasting six hours; *first in left leg, then in right*,³³⁹.—Prickling pains in both legs, from soles to about two inches above knees. Sensation was completely lost in left leg, and considerably impaired in the right. In both there was total loss of all power of motion. She said she had been unable to get about for the last fortnight, and that for some weeks previously she had had considerable difficulty in doing so (after three months),³⁰².—Swelling of feet (one case),²⁷⁸.—Sensation of fuziness in the soles of the feet, with formication and pain; this numbness and painful sensation gradually extended up the calves and thighs, associated with pains, which the patient described as if caused by cutting instruments,³⁷⁴.

Generalities.—Emaciation,^{295 301}, etc.—Extreme emaciation,^{363 374}.—Sank with typhoid symptoms,²⁷⁷.—The woman sank in a typhoid state four days and twenty hours after taking the poison,²⁵⁶.—When seen at the end of three months she was in bed, looking pale and haggard,³⁰².—Found ill at 3 P.M., but she would not at first speak or take anything. Afterwards she took what was offered. There was great pain in stomach, frequent severe vomitings; occasional hiccough. She continued about thirty-eight hours in this state; was then seized with occasional slight convulsive attacks, and died in a convulsion, upwards of forty hours after she was first seen by the neighbors,³¹¹.—[3410.] In about an hour she was brought in in a state of exhaustion; pulse scarcely perceptible; skin cold; pupils fixed; incapable of answering when spoken to; pressure in epigastric region gave excessive pain, under which she would writhe and utter some imperfect sound; tongue dry; appeared to wish for drink constantly. The washings of the stomach returned tinged with blood; died,²⁴⁶.—Found in bed yawning and retching a little, and complaining of headache, sickness, and pain in the bowels. Thirst, a sense of coldness, and a little vomiting. Four hours later she suddenly became blue in the face, made one or two inspirations, and expired without a struggle,²⁴³.—Arsenical poisoning, which begins with conjunctivitis, sparkling eyes, and anasarca, simulating increased fat; ending with a hidebound skeleton slowly sinking to the tomb,³¹³.—They all appeared suffering from the same complaint, nor could they well explain how they

felt. At night they were worse than in the daytime, and always very restless, the muscles of the face being marked by a kind of twitching.³¹⁹—In one case (Flecker), if he intermits it for fourteen days, he feels stiff in the feet, with general lassitude and craving for another dose. If he takes a full dose he brings a great deal of wind off his stomach,³²⁰—After spending some time in her room, she would come out thoroughly exhausted; was very “logy,” became bloated, and was generally running down. For some time she had had an ulcer on the face, which had not yielded to medical treatment,³⁷⁹—His case was similar to that of the lady first mentioned, was marked, however, by more violent febrile manifestations and delirium, and he was for some time in danger of his life. One eye was lost by the sequelæ of conjunctivitis, and the other permanently injured. He was for a long time unable to sleep,³⁸¹—Found lying on stairs apparently in great agony, and complaining of a burning pain in the stomach, with violent retching, headache, and great thirst (first night). In the morning much better, her face flushed and swollen, and she complained of burning pain in the stomach, headache, and dizziness (second day),²³¹—Great pain and burning heat in the stomach, headache, immediate thirst, vomiting and purging, with olive-green alvine discharges, tension of the abdomen, the face swollen, cold chills, alternating with flushes of heat; light painful to eyes; bearing pains more or less constant in the loins (first day). Unable to endure a strong light; pulse 130; this rapid circulation was accompanied with constant sensations of fainting; bearing pains, with the pain in the loins somewhat abated (second day). Pain in loins constant, with occasional bearing down of the womb, the thirst rather less urgent, the pulse 110, headache, vertigo, great intolerance to light, the tongue white and moist, the skin hot, frequent palpitations of the heart, and a constant sensation of fainting; a numbness extending from the right side down to the foot; the burning sensation of the stomach was excited and increased by the motion of the child *in utero*; the face was flushed and swollen, and the tongue and lips sore, which extended along the course of the œsophagus (third day). Violent headache, and to the light she had still great objection, as it immediately on accession increased the headache; at times the heart palpitated strongly, the thirst was considerable, the pulse 100, the tongue less charged and moist, the child *in utero* moved with vigor, and whenever this occurred the pain in the stomach was increased, with nausea (fourth day). Pulse continued at or about 100 for a fortnight afterward. She went her full time, and a very fine girl was born, after a safe but lingering labor,²³³—Urgent thirst somewhat allayed by frequently washing mouth with cold water (first day). All passed a restless night; the vomiting in each had greatly abated, the pain in the stomach still violent, which they all compared to a furnace, or hot irons; alvine discharges changing to a proper color, but intermixed with streaks of green, and highly offensive; skin hot and dry; the pulse quick, varying in each case from 100 to 130, great thirst, and violent headache; tongue white and moist (second day). Face swollen, with a fixed redness, more or less under the eyes and on the cheek-bones; vomited two or three times in the course of the night, by drinking too copious draught of the diluents, and each complained of the tongue and lips being sore and swollen. In the evening the febrile symptoms had a little abated, the pain in the stomach was intense, occasionally remitting, and again returning with increased violence, with nausea and vomiting, much pain in the head, considerable thirst, and bowels open (third day). Febrile symptoms subsided. They complained of a

variety of singular nervous affections, tingling and burning sensations in the hands and feet (fourth day),^{232 233 234 235}—[3420.] Burning sensation in the stomach, vomiting, inordinate thirst, headache, face swollen, tension of the abdomen; purgative symptom moderate; countenance flushed, particularly on the upper part of the cheeks (first day). Pulse 90, skin temperate, tongue moist and cleaner; the vomiting had subsided, but the stomach was in great pain; he complained of extreme lassitude; face flushed (second day). Pain in stomach occasionally troublesome, appetite returning, face less swollen, but flushed and red under the eyes and on the cheek-bones, extending towards the ears (third day),²³⁴.—She was found in bed early in the evening suffering much from sickness, vomiting, and purging. Continued to get worse all night. Next morning the symptoms were much like those of cholera, except that the vomited matter was like thin coffee-grounds. She was extremely sullen and silent, would not answer any question, and would rather suffer thirst than ask for drink. Pulse feeble, tongue white, epigastrium tender. Next day symptoms much aggravated. Countenance had assumed a sunken aspect and dark leaden hue. Everything taken into the stomach was immediately rejected, and the purging was also frequent, with pain and straining. This state continued with little variation till next morning, when she died convulsed, sixty hours after the first symptoms were noticed,²¹⁰.—Some restlessness during the night, with watchfulness and slight pain in stomach. In morning she became sick and complained of great thirst; the pain in stomach had become much more intense. During the day sickness increased, and she was repeatedly purged; countenance looked pinched and extremities cold. From this state she soon rallied, and next night (Wednesday) she became cheerful and slept comfortably, though she was distressed once or twice by the thirst, which still affected her. Thursday morning she was worse, being cold and drowsy; she was evidently dying; face pale and anxious; extremities cold and bedewed with clammy sweat; pulse hardly perceptible; and she lay in a state of incipient coma. From this time (9 o'clock) she became more and more comatose, and gradually sank at 12,²⁶¹.—Eyes a little suffused, with slight lividity of the inner portion of the under lids; skin moist, pulse accelerated, small and feeble; vomited several times freely, and in the meantime had a copious natural dejection; at first formed, and afterwards liquid, without blood; while at stool vomited upon the floor about two ounces of porridge-like matter, tinged yellow with bile,²⁵².—Vomiting and purging; vomiting at first very violent and frequent; occasional purging, sometimes of blood; soreness of the mouth, and pain of the throat, stomach, and bowels; hoarseness and oppressed breathing (up to fifth day); pulse 120, full, soft, and regular; skin hot and dry; tongue parched and excoriated; throat spotted inwardly with little white ulcers; voice hoarse and feeble; breathing hurried and laborious; swallowing painful and difficult; the belly round, swollen, and painful, but not tender to the touch; very exhausted, and complained of general soreness (fifth day); pulse 120, and throbbing; breathing difficult; tongue red and parched; gums tender and shining, without salivation; soreness in the throat, descending along the gullet into the chest, and there was an excoriation on each side of the uvula, a white ulcer on the left tonsil, and redness and tenderness of the rest of the throat and back of the palate; she swallowed with such difficulty that a small quantity of any liquid caused violent gasping, hurried cough, and much pain; she complained further of sickness and dull pain, and tenderness in the stomach

and bowels, and likewise of pain in the feet and legs. The vomiting continued to recur throughout the day. In the evening the fever had increased; the pains in the feet and legs were more severe; and she complained of soreness and tenderness of the labia pudendi; though in neither situation could any unnatural appearance be discovered (sixth day); some delirium in the evening (seventh day); fever lessened in the morning and increased at night (seventh and eighth days); about midnight taken with labor pains, and in three hours brought forth a stillborn fœtus, weighing nineteen ounces, and apparently between the fifth and sixth month. The delivery was difficult and distressing; and although there was no flooding, she was so feeble she was not expected to live (eighth day); fever continued with morning remissions and evening exacerbations (ninth to twelfth day); pain in hands like those in feet (eleventh day); want of power in the feet and hands, and so severe pain in them that she could not sleep without opium (twelfth day); headache, restlessness, fever, loss of appetite (twenty-seventh day); her sufferings went on increasing steadily, her strength decayed, and she died on the forty-fifth day with symptoms of low fever,³⁴¹.—The Arsenic is taken pure in some warm liquid, as coffee, fasting, beginning with a bit the size of a pin's head, and increasing to that of a pea. The complexion and general appearance are much improved, and the parties using it seldom look so old as they really are. The first dose is always followed by slight symptoms of poisoning, such as burning pain in the stomach and sickness, but not very severe. Once begun it can only be left off by very gradually diminishing the daily dose, as a sudden cessation causes sickness, burning pains in the stomach, and other symptoms of poisoning, very speedily followed by death. As a rule Arsenic-eaters are very long-lived, and are peculiarly exempt from infectious diseases, fevers, etc.; but unless they gradually give up the practice invariably die suddenly at last. In some Arsenic works near Salzburg, the only men who can stand the work for any time, are those who swallow daily doses of Arsenic, the fumes, etc., soon killing the others,³²⁰.—About an hour after taking my first dose (I took the same quantity, 3 grains, daily for three months), there followed slight perspiration, with griping pains in the bowels, and after three or four hours a loose evacuation; this was followed by a keen appetite, and a feeling of excitement. With the exception of the pain, the same symptoms follow every increase of the dose. I subjoin as a caution, that it is not advisable to begin Arsenic-eating before the age of twelve or after thirty years. Evil consequences only ensue from a long-continued interruption. From circumstances I am often obliged to leave it off for two or three days, and I feel only slight languor and loss of appetite, and I resume taking Arsenic in somewhat smaller doses. Once on the third day of the second week, after leaving off the dose, I was attacked with faintness, depression of spirits, mental weakness, and a total loss of the little appetite I still had; sleep also entirely deserted me. On the fourth day I had violent palpitation of the heart, accompanied by profuse perspiration. Inflammation of the lungs followed, and I was laid up for nine weeks, the same as on the first occasion of leaving off Arsenic. Had I not been bled I should most likely have died of apoplexy. As a restorative I resumed the Arsenic-eating in smaller doses,³²¹.—First appeared irritation of the mucous membrane, causing diarrhœa and vomiting, with various other symptoms of severe gastric derangement, resulting in permanent indigestion; also incessant severe cold in the head, which, in one instance, lasted for several years without being touched by any remedy; ulcerated

throats, with acute inflammation, resembling diphtheria and quinsy; severe spasmodic cough, spasmodic asthma, bronchitis, and congestion of the lungs; soreness of the mouth, lips, and tongue, which appeared as if scalded in patches; inflammation of the eyes and eyelids (the conjunctiva invariably being bright red), in one case threatening absolute loss of sight; congestion and torpidity of the liver, with the various symptoms resulting therefrom, and severe bilious and feverish attacks. There was, in short, irritation of every organ. In many cases, if not in all, the action of the heart was weakened, and in some palpitation frequently occurred. There were pains in various parts of the body, especially across the shoulders, down the spine and limbs, also in the joints, which were often stiff and swollen; scaling of the skin and irritating eruptions, which no remedy ever relieved except Turkish baths. The effects upon the nervous system were most remarkable, producing a thoroughly shattered constitution; great irritability, depression, and tendency to tears. These latter symptoms were especially marked in the children, and also in servants who had come to the house in ordinarily good health, and who each became affected by degrees as above described. The list also includes giddiness, headache, acute earache, and neuralgia; bleeding at the nose; frightful dreams; faintness; cramps, rigor and numbness of the limbs; rigid spasms and convulsions. The last symptoms developed in the worst cases were loss of memory, and threatenings of paralysis; also spasms, with twitching of the body and limbs.³⁴⁰—After about twelve hours, when on the stool, he suddenly felt great difficulty in breathing, with cramp in the chest, hands, and arms; immediately afterwards the cramp attacked both calves, and he became very cold all over and stiff, so that he became completely helpless, and had to be entirely lifted into bed. Violent vomiting very soon set in, and the cramp became more severe in the calves, though it did not again affect the chest and arms. The breathing, however, continued to be much oppressed for two hours. He was by this time in a state of great prostration; countenance strangely anxious, and very restless; skin cold and clammy; pulse very feeble and frequent; eyes deeply sunken and surrounded with a well-marked dark border; lips and tongue parched, with great thirst; breathing slow and much oppressed; sometimes sighing; burning pain in stomach, increased on pressure, and inclination to vomit; extremities icy cold in spite of hot applications; had had severe vomiting, with griping pain in bowels, and purging; also cramps, first in chest and arms, and afterwards in calves. After a few minutes most violent cramps came on in both calves, causing intense suffering, and rendering the muscles hard and knotty. The cramp came on almost every fifteen minutes, lasting a few minutes each time; the slightest movement, such as turning in bed, seemed at once to excite the spasm. Violent vomiting of a greenish-yellow fluid also occurred at intervals. Brandy and all warm drinks were almost immediately rejected, but a little cold water was retained. Mustard plasters applied to the spine, chest, and calves, were scarcely felt by him,³³⁸.—One man got a sore mouth; another had every symptom of a cold, and felt a general stiffness of the limbs; a woman was in the room for half an hour, and her throat became rough and remained so for some days. A paperhanger in the same neighborhood remarked that his mouth was always sore when he put on green paper, and his men often spoke of their eyes becoming inflamed and their hands ulcerated,³⁴¹.—[3430.] The symptoms commenced within a half to three-quarters of an hour after eating dinner. They had faintness, nausea, and incessant vomiting, with a burning pain in the epi-

gastrium, increased on pressure, and gradually extending over the whole abdomen, followed by headache and severe diarrhœa, with a sense of constriction and heat in the fauces and throat, great thirst, and in some painful respiration. Pulse quick and very feeble, from 100 to 180; cold, clammy skin, with very severe cramps in the legs in those who had diarrhœa. Some of the men had tumefaction of the penis. The above symptoms were found in all the men. Some were collapsed. A great many had severe cramps in their legs until 11 o'clock at night, and some little pains in the abdomen for several days. Ten of the men had slight gastritis. One man had and still has paralysis of the left arm and leg, and the sensibility of the skin is impaired; he complains of coldness in his limbs.³⁸⁷—Three or four years after occupying the room, or perhaps a little earlier, she began to have a feeling of general malaise. The first thing she recalls is a sensation of exhaustion. It was especially difficult for her to rise in the morning, although awake at a very early hour. The debility increased as the illness went on. She would feel quite well and strong for a time, and would at once experience the sense of prostration on making any attempt at movement, and at times, on any unusual mental exertion, making the duties of a housekeeper particularly onerous. She speedily increased considerably in weight, from about one hundred and twenty-five to one hundred and sixty pounds. This condition lasted for some months, and then gave place to emaciation. At certain intervals afterwards the various symptoms of the digestive, nervous, and circulatory systems, which I shall mention, appeared and increased in severity up to the time I saw her. The precise date of the access of each symptom is unknown, but each had shown itself, either continuously or at intervals, for a number of years before. I found her in bed, perfectly prostrated, hardly able to move hand or foot; with skin very dry and rough; hands and feet cold or cool to myself and to the patient. Emaciation was marked; a countenance naturally rosy had become sallow; tongue inflamed, dry, cracked, with a brownish coat in centre; gums also dry and angry. The sensation of dryness was apparent to herself, with a feeling as if the mouth were lined with flannel. No sensation of dryness or pain in the throat or œsophagus. Nausea often about 10 P.M., and nearly always when she awakened, but not during the night, unless she happened to be up and about for any purpose. At times pressure in the stomach; frequent thirst in the evening, seldom during the day; capricious appetite. During her early years she had often had diarrhœa, but she had been free from it for some years. Two or three years ago it came on at intervals; of late it had been more marked, the discharges watery and painful. Her eyes had for some time shown signs of weakness and congestion. They had previously been very strong. At last she could not open the lids at night without lifting them with her fingers. At the time I saw her there was marked conjunctivitis, as if from some external irritation. No headache, but an "aching tired sensation" in base of brain. At times, during the past few years and never before, a tenderness in the neighborhood of the liver, which would pass away after slight diarrhœa. A carbuncle or perhaps a large boil on the back was reported as having occurred three or four years before. The sleep was more easily disturbed than when in health, and she had often wakened chilly or feverish. The feet and legs, to the knees, were frequently cramped, and had been relieved by warm applications and frictions. The symptoms detailed had always been, to a certain extent, relieved during absence from home; but in about ten days after her return the exhaustion and other

evidences of disease would recur, and soon be as bad as ever,¹⁷⁷.—Involuntary twitching of muscles,²⁴⁸.—Constant jactitation,²⁹⁹.—Trembling,^{327 354}.—Nervous twitchings,³²⁷.—Universal tremors,^{248 326}.—Tremblings and spasms of extremities,³³⁶.—Convulsive spasms,³⁵⁶.—Convulsions,^{327 364}.—[3440.] General convulsions,³⁵⁷.—Convulsions with loss of consciousness, followed by colic,³⁶⁵.—Three spasms within an hour, the first one very severe, the second and third consecutively lighter (after six hours); slight spasm, confined to the muscles of the thighs and legs (after seven hours),³³⁰.—Violent spasms, and what she termed cramps in the legs,³³².—One was seized with convulsions, and died in about five hours in a strong convulsive fit,²³⁰.—Convulsive tremors, “so that the bed shook under him,” accompanied by sensations of cold and extreme faintness²⁵⁶.—Fits resembling epilepsy, except in the absence of frothing at mouth,²⁹².—The little boy had been in convulsions, and was then in a semicomatose state. The child had felt chilly, and had been sick. In the evening the symptoms seemed somewhat relieved by the remedies administered, but during the night he became worse; and his sister was also seized with convulsions, followed by dysenteric discharge from the bowels,³²².—Convulsion followed convulsion in rapid succession, and so stiff and rigid was the entire muscular system that no sort of external muscular force could have succeeded in producing the least amount of flexion of either arm, leg, or other joint of the body, without producing lesion. So clenched were the teeth as scarcely to admit of the escape of the froth and contents of the mouth and stomach,³⁴⁶.—Found prone on the floor, body arched in a curve. As I took him by the hand and called him by name he instantly became so convulsed that three men could with difficulty restrain him. The paroxysm lasted thirty or forty seconds. The convulsive paroxysms were attended with wild, staring, bloodshot eyes, with imprecations and fearful ravings, and with maniacal fury. When the convulsions ceased he invariably sank into a temporary prostration. His pulse during the intervals was irregular, uneven, intermittent, and accelerated,³⁰⁰.—[3450.] In twelve hours he began to feel a stiffness of neck, with slight difficulty in swallowing; the cuticle of scrotum peeled off entirely, leaving the *cutis vera* exposed, inflamed, and bleeding; both testes were enlarged, and could not be touched; great thirst and headache; the most distressing symptom was an indescribable sensation as if the hair was standing on end, and being pulled up by the roots. Stomach was irritable with vomiting, and epigastrium was painful on pressure. He had been purged twice freely, and said he felt as if his bowels were on fire,²⁹⁸.—He appeared to be nearly *in articulo mortis*; his face, which had been swollen, having assumed the appearance of the true *facies hippocratica*. On examining the contents of the utensils in which he had vomited, a fluid was perceived of a yellowish and greenish color, and in two of them stercoraceous matter; the pulse was gone, his voice faint and tremulous; and he pointed to the abdomen in great agony. On examination I discovered a very remarkable irregularity of surface, occasioned by the spasmodic contractions of the muscles of the abdomen, and even of the viscera; this unevenness extended from the epigastric region to the pubis, and to the right and left hypochondrium. He complained of extreme faintness, and dreadful sickness. He had been violently purged; the alvine secretions were all of a bright homogeneous green color, like paint. Each effort of vomiting and purging was preceded and followed by these painful gripings and spasmodic contractions of the abdominal muscles. He also complained of great heat in the stomach, which he compared to a

*furnace, or red hot irons, which sensation commenced at the tongue, and was felt throughout the course of the œsophagus to the cardia, or upper orifice of the stomach; insatiable thirst, violent headache, the eyes impatient of light, but the pupils sensible, and the extremities cold. The patient attempted in this dreadful state to get out of bed, to walk to the night table; he was directly seized with vertigo, dimness of sight, and palpitation of the heart; he fell down, and went off into an epileptic fit; he was assisted on the bed, and in a few minutes recovered from the fit (first day). In the early part of the morning he had another attack of epilepsy; the symptomatic fever ran high, the pulse 120; he complained of spasmodic twitchings about the chest and abdomen, palpitation of the heart, great languor, accompanied with a constant sensation of fainting, tongue white but not dry, occasional chills, followed by an increase of heat, headache, and vertigo (second day). Skin moist and more temperate, tongue less coated, not dry, but sore and swollen, the burning heat in the stomach rather less violent, and he expressed a degree of hunger; the pulse 98, spasmodic twitches in the arms and legs, with a cold sensation in the latter (third day). Tingling and burning sensations, beginning at the extremity of the fingers and gradually creeping to the shoulders; sometimes one foot, and at others both affected with a burning feel, commencing at the toes and gradually rising above the ankle-joint; palpitation of the heart, great depression of the spirits, with a perpetual sensation of swooning, and frequent twitchings of the muscles of the chest and abdomen, and of the upper and lower extremities (fourth day). Owing to eating a free portion of animal food he suffered a slight relapse of the fever and much pain in the stomach, also passed a restless night, with much thirst, and was again attacked with spasmodic twitchings in the chest and upper and lower extremities (fifth day). He complained of a very singular affection in the upper and lower extremities; the arms were several times in the course of the day seized with a numbness and prickly feeling, accompanied with a sense of great weight, like what is commonly called being asleep; and this symptom continued daily, more or less frequently, for six weeks, but, upon raising the arms in an upright position, it immediately subsided. The same feeling almost as constantly attacked the legs, but occasionally with and sometimes without the corresponding affection of the arms; the legs were some minutes longer affected, by reason of his not being able, as he himself observed, to place them in the same position as the arms (ninth day),²⁹².—Burning heat in the stomach, much nausea, with vomiting and severe gripings, with purging, extreme faintness, palpitation of the heart, headache, trembling of the right arm, and right lower extremity (first day). Four epileptic fits in the course of the night, preceded by violent palpitation of the heart, accompanied with a peculiar tremulous action of the right arm and lower extremity; a considerable degree of symptomatic fever, insatiable thirst, a white but moist tongue, the face flushed, the respiration hurried. Pulse 126, irregular and contracted, frequent gripings in the bowels, and spasmodic twitchings in the muscles of the chest and abdomen (second day). Much fever, respiration hurried and great thirst, violent and incessant palpitation of the heart; the fits had recurred twice in the night; he had had no sound sleep; if he went into a doze, he woke suddenly and much agitated; the pulse 120; spasmodic twitches, with tremor in the right arm and lower extremity, violent headache, and the eyes painfully affected by light; constant vertigo, which was increased if he attempted to sit up in bed, or upon the slightest exertion (third day).

Only one attack of the epileptic fit in the night, and had slept three or four hours towards the morning; pulse 100, breathing less hurried and more natural (fourth day). A relapse of the fit in the night, preceded by palpitation of the heart and tremulous agitation of the right arm and lower extremity; the fit lasted nearly two hours (fifth day). On the eighth day an epileptic fit at 8 P.M., and it returned daily and periodically about the same hour every evening for a fortnight afterwards; the fit generally lasted nearly two hours, and he required, from the violence of his struggles, the assistance of several persons to hold him whilst the epilepsy continued. On recovering he looked wild, forgot where he was, and talked incoherently, and as he gradually emerged from this state, complained of extreme languor, with great prostration of strength. Towards the latter end of the second week, the fit became shorter and less severe, and he sooner recovered when out of it; and at the expiration of a fortnight from the first effects of the poison, he enjoyed an interval of seven or eight days without a relapse; hopes were then entertained that he would recover, "the fits becoming every day shorter, and recovery from each more rapid and complete." But they again returned with the same or even greater degree of violence, and he has been afflicted with fits up to the present time; he appears to have outgrown his strength, possesses very delicate stamina, and serious apprehensions are still entertained of the result.²⁴⁵—Vomiting in the course of half an hour; soon afterwards, several dejections. Vomiting and purging, at short intervals, continued through the day. Evacuations consisting mostly of a serous fluid and bile. Quantity vomited during the day amounted to six or eight quarts by estimation. In the afternoon, on attempting to walk from one bed to another, he fell down senseless, was convulsed, had cramp in extremities, and was cold. At 7 in the evening, seventeen hours after taking the medicine, found him as follows: Extremities cold, bathed in perspiration; skin blue and corrugated, feeling as if parboiled; no pulse perceptible at wrist; pulsations of carotids rapid and fluttering; eyeballs retracted in orbits; countenance livid; voice husky and guttural; extreme thirst; distress at epigastrium; frequent vomiting; mind clear; whole appearance like that of a person affected with malignant cholera. Cramps and coldness of extremities increased, vision failed, voice faltered, throat became dry, tongue swollen, annoyed by hiccoughs, delirium, and at last death.²⁴⁹—Arsenical ointment was applied (to cure chronic inflammation) to the breast of a woman, aged thirty-nine, the cuticle having been removed. The first application was May 21st, and was immediately followed by severe violent burning in the breast. Violent headache, thirst, sickness, and occasional retching, numbness in arms and legs, sleeplessness, and loss of appetite supervened in a short time. The application was repeated daily till 25th. On this day the pain in the breast became intolerable; there was faintness and palpitation. Inflammatory action extended from the breast to the shoulder and arm. On the evening of the 26th she had severe pain in belly. On the 27th the points of the sore not sloughing were smeared with ointment. About 2 P.M., she was seized with a kind of fit, with lividity of the face, foaming at the mouth, and moaning. She continued unconscious for several minutes, and on regaining consciousness, said she had been in a queer place, that she felt as it were a dart go through her, that she then became insensible, and had no further recollection of what happened to her during the fit. In the afternoon she felt more comfortable. Between 9 and 10 P.M., she suddenly said, "There it is again," was off in a fit, and died immediately.³⁶⁷

—Cramp attacked his legs and stomach; the muscles of the former were spasmodically contracted, and the abdomen was also rigid and tender. In the intervals of the paroxysm of the pain he lay with his eyes half closed; tongue covered with a creamy fur. The breathing soon became more rapid and rather difficult, and accompanied by an increasing lividity of face. The spasms continued, but never attained to anything like general convulsions.²⁹²—Great muscular activity and aptitude for walking.³¹⁷—Agitation.³⁵⁴—Restlessness.^{354 372}, etc.—Restless and anxious.²⁶⁴.—[3460.] Great restlessness,^{270 341}, etc.—Tossing about the bed in a sort of anguish.³⁵⁰—General restlessness, worse at night.³²⁴.—Uneasiness over the whole body, especially in arms and legs.²³⁹.—The patient experienced an unusual immobility of the eye and extremities, while the muscles of the head and face seemed normal.³⁷⁴.—Two had partial paralysis (in one, of sensation in fingers, and in the other, of motion of the lower extremities).²⁷⁸.—In about five minutes a peculiar tingling sensation commenced in left arm, lasting about forty-five minutes. Fifth day, numbness of thighs and calves. Eleventh day, anæsthesia of fingers, and partial paralysis of flexors of forearm; a similar condition shortly afterwards attended the lower extremities, and was accompanied in both by pain persisting for a few days. In five weeks from the commencement of the illness, skin of entire body had desquamated; most remarkably so on hands. In six weeks the paralysis of flexors of both extremities was unabated, and accompanied with soreness on pressure. In two months and a half he was still unable to stand without support. In eight months the paralysis of sensation and motion and the soreness on pressure still continued, though less. In twenty-three months nearly well.²⁶⁹.—Feebleness.³³⁶.—Weakness.³⁷⁴.—Extreme weakness.³⁴⁵.—[3470.] Gradually diminishing strength.³⁶⁶.—Felt weary, could not sit up.³⁷⁶.—Malaise.³⁴².—Lassitude (soon).²⁵⁹.—Great languor.³⁰¹.—Debility.²⁹⁰.—General debility.²⁸⁵.—Great exhaustion (second day).³⁷³.—Loss of muscular power, which assumed the form rather of great general debility than that of a partial or paralytic affection; and existed in such a degree that she professed inability to walk.²⁴¹.—Extreme exhaustion, feeble whispering voice, pulse scarcely perceptible.²⁴⁸.—[3480.] Prostration.^{356 359}, etc.—Internal irritation; after three weeks I became completely prostrated, almost losing the use of my left side.²⁹⁷.—Extreme prostration.^{348 351}, etc.—Faintness.^{239 273}, etc.—Affections of the tactile sensation.³³⁶.—Complained of a disagreeable numbness and tingling.³¹².—Cramps.²⁶⁹.—Cramps general.³⁵¹.—Constant cramps.³⁵⁰.—Much pain throughout the whole system.³⁴⁶

Skin.—Objective. [3490.] Skin dry.³⁶⁹.—The skin seemed anæmic and without lustre, was hard parchment like, and could be raised up in thin folds from the underlying tissues, especially as all the fat had disappeared.³⁷⁴.—General scurfiness of the face and body.³⁶⁷.—After forty-eight hours there was desquamation of the rash, and all the symptoms disappeared.³⁶⁹.—General desquamation of cuticle.²⁸³.—Desquamation of the cuticle of the face.²⁷⁷.—Three had desquamation of cuticle (some of hands, others of neck and nostrils).²⁷⁸.—The body became covered with red spots.³⁶⁶.—Severe hepatic [*? herpetic*, E. W. B.] eruptions.³³⁶.—Lips covered with black spots.³⁵⁷.—[3500.] Arms more livid than natural.²⁴⁵.—Cyanotic spots on the anterior portions of the thighs, not removed by pressure.³⁴¹.—Miliary eruption.³⁶⁶.—Eruption like intense scarlet rash, covering nearly the whole body, except the face; it began on the anterior surface of the body, and spread rapidly, without disappearing from its primary seat. The skin was intensely red, much swollen, covered with numberless fine

blisters. The eruption was associated with the most violent itching and burning, disturbing the sleep, reaching its height in five or six days, and then fading; followed by desquamation; the desquamation was very slow, in large and small scales,³⁴⁵.—The whole body became covered with an eruption of small pimples, like miliary rash;³⁴⁶.—General miliary eruption over the whole body, on the sixth day, immediately followed by amelioration of all the symptoms, and re-establishment of the urinary discharge; this eruption lasted five days, after which the body was covered with fine mealy scales,³⁵⁷.—Severe eruptions, violent constitutional symptoms, and even death,²⁹⁹.—Eruptions chiefly on hands, forearms, scrotum, and thighs, and the suffering proves intense should they have chapped hands at the time,²⁹⁸.—Numerous pecthial spots over the skin of the trunk and thighs,³⁷².—Miliary eruption confined to the forehead, wrists, and feet (third day),²⁷¹.—[3510.] Pimples or vesicles round mouth (fifth day),²⁷⁰.—Towards the close small spots of purpura on neck,²⁷⁷.—Pimples on the hands, chest, and forehead,³⁶⁷.—Redness of the hand, with red points extending half way up the forearm,³⁷⁴.—Arsenic causes shingles,³³⁵.—A vesicular eruption over the greater part of right ear, and also of nose; several vesicles have coalesced, forming large patches; they are all surrounded by an inflamed base,²⁵⁶.—Vesicular inflammation of the whole face, with acute itching (third day),³⁶¹.—Vesicles about the mouth (one case),²⁵⁸.—Small white blisters on the inner side of both thumbs, containing a clear watery liquid,³⁷¹.—Blistering of the feet,²⁵⁴.—[3520.] General erysipelas, with sensation of a devouring fire,³⁷⁰.—Cutaneous affections of a mixed pustular and scaly character, attacking especially the scrotum, the depression between lower lip and chin, the angles of nose and face, the line along which the hat fits the forehead, in short, every crevice and fold where the Arsenic can accumulate,²⁹⁴.—Various eruptions on the parts most exposed, chiefly arms and legs; sometimes the eruptions resemble eczema, but more frequently they are pustular, and large boils are not uncommon,²⁹⁹.—Obstinate pustular eruptions,²³⁰.—Eruption of pustules resembling the itching, followed by desquamation,³⁵⁸.—In some of the persons pustules appeared on the forehead,²⁷⁴.—Face covered with pustules,³⁶⁷.—On the sixth day eruption of white pustules on the face and upper part of the body, resembling in appearance and progress those of varioloid,³⁵⁹.—Eruption of pustules about angles of mouth,²⁶¹.—His hands were contracted, and he was frequently sick during the three months he was at work. At last the Arsenic entered the hand, the skin being broken; his left hand and forearm were swollen; also the left axillary glands; the hand was inflamed; purple patches gradually covered his arm and side. He died,²⁵⁷.—[3530.] Eruption of boils which refused to heal,³¹².—In a case of chorea the Arsenical solution produced a copious crop of boils,³⁰⁴.—The workmen are subject to irritations which produce itching, blotches, rawness, and perhaps boils. In one factory where one hundred women are employed in making artificial flowers, hardly any of them escaped skin diseases. The hands, face, neck, roots of hair, flexure of arms, axilla, and in a most distressing degree the genitals, were affected; the pudendal eruptions being often so severe that they could not bear to sit down,³²⁷.—Several small superficial ulcers extending along the inner surface of each lip, varying in size from mere specks, the largest being $\frac{1}{2}$ th inch in diameter. The smarting and annoyance were intolerable, and much increased in the evening [when he inhaled much of the poison], when the lips swelled and became so painful that eating or even speaking could

scarcely be indulged in. He got better, but returned worse than ever; all the old ulcers had reopened, several new ones formed, lips much swollen, with profuse pytalism,³²³.—The lips became incrustated, and the skin cracked and peeled,²¹⁷.—Inflammation of the skin of the lower part of the abdomen, penis, scrotum, and upper part of thighs; in some places the inflammatory action had gone on to ulceration. The pain was severe and burning. There were signs of considerable constitutional derangement. The evening of the same day on which he washed the sheep he had smarting and pain in the affected region; this increased, and the next morning the parts were red and inflamed. It was more than a fortnight before he was able to resume his work,³⁰⁶.—**Subjective.** One woman said she had been tormented for the last two days and nights with irritation of skin, which she compared to being in a bagful of fleas (eighth day),³⁴⁴.—Prickling sensation over the whole skin,³⁶⁷.—Itching over the whole body,³⁷⁴.—Constant itching of eyebrows and forehead,²⁶⁶.—[3540.] Violent itching of the extremities,³⁶³.

Sleep.—Drowsiness,^{327 372}.—Drowsy, but easily roused (after six hours),²⁶².—Sleepiness,³⁵⁶.—Sleepy shortly before death,²⁸⁰.—Somnolence (thirteenth day),³⁵⁹.—Somnolence just before death,³⁵³.—Occasional light sleep, with muttering delirium,³⁰⁷.—Sleeplessness,^{282 355}.

Fever.—Chilliness. Chilliness,^{351 354}.—[3550.] General chilliness,³⁶².—Chilliness, with cold extremities,²³⁶.—Shivering and coldness of surface,²⁶⁶.—Shivering,^{345 354}.—Shivering, recurring when he drank,³⁷⁹.—General sense of coldness,²³⁰.—Distressing sensation of cold during the whole night,²²⁹.—Cold skin,^{258 262}, etc.—Skin cold and clammy,^{309 373}.—Skin cold and slightly livid (in five hours and a half),²⁹².—[3560.] Skin cool and moist,³²⁴.—Trunk and extremities cold,³⁶¹.—Sensation of cold over whole body (after five hours); increased (after six hours),²⁹³.—Tip of the nose cold, pinched,³⁴¹.—Sensation as if cold water were poured down back,²⁸².—Cold extremities,^{245 273}.—Extremities cold, with most violent pain in the abdomen,³⁴⁹.—Coldness of the hands and feet,^{345 350}.—Feet a little cold (after five hours),²⁹³.

Heat. Fever,^{248 327 350}.—[3570.] General fever, with coldness of the feet,³⁷².—Very violent fever,³⁷².—She had three attacks of intermittent fever; the first in November, 1875, lasting three days; the second in December, 1875, lasting seven days, and the third from 14th to 16th of January, 1876. The symptoms of the attacks were as follows: Between 8.30 and 9 A.M., after getting out of bed, chilly, with chattering of teeth, nails and lips blue, sometimes sickness on waking, bad taste in mouth, desire for much cold drink, pulse feeble, wants to lie down and to be quiet, and wrapped up, breath offensive, tongue brown; this lasts till 1 P.M., then fever comes on. During the fever there is full pulse, frontal pain, not much thirst, especially hot to touch on abdomen, with pain there, feet and hands cold objectively, not subjectively, cannot bear the least draught, breath offensive, tongue brown; this lasts till 4 or 5 P.M.; she then seems well for one or two hours. Then about 6 P.M. she is slightly chilly till about 8 P.M., then there is heat again, cannot sleep, bad dreams, cannot sleep after 3 A.M. She is losing flesh very fast, and getting very weak. The second attack was the most severe, and the third (which occurred after she had been removed to another room) was the slightest,³⁷².—In this way can be produced in healthy persons attacks of remittent fever, though not such rigors as those of true fever, but only flushing heats, disappearing and returning, and chiefly felt in præcordial region and forehead. Such acces-

sions terminate sometimes in partial or general sweats, and at other times merely in a moist state of skin. This *Arsenical* fever never acquires any regular type. It is rare for the excitation to be carried to this degree, and there is more usually an increase, more or less considerable, of the heat of the body, which seems to have its source in the stomach and præcordial region, whence it passes to the rest of the body, but is especially felt in forehead and eyebrows. To produce these effects a rather strong dose is required,³¹⁷.—Heat over the whole body, except the hands,³⁵⁵.—Violent heat internally and externally,³⁶⁹.—Temperature increased (in the rectum 38.6°),³⁶².—The feeling of heat *within* did not leave him for a week,²³⁹.—Heat of skin,^{239 269 375}.—Heat and dryness of skin,²⁷¹.—[3580.] Alternations of heat and chilliness,³⁶³.—**Sweat.** Profuse sweating on the least exertion,²⁹⁵.—Skin moist and temperature good (after five hours); moist and cool (after six hours),²⁹³.—Cold clammy sweat,²⁸².—Skin covered with cold clammy sweat,³⁰⁷.—Clammy perspiration,²⁴⁵.—Cold sweat,³⁶³.—Whole body, and particularly hands and feet, covered with cold sweat,²⁴⁵.—Cold sweats broke out profusely over surface of body,³⁵⁴.—Fetid perspiration on the whole body,³⁵⁷.—[3590.] Abundant perspiration (after eight days),³⁵².

ARSENICUM HYDROGENISATUM.

Authorities. (6 to 12. from Berridge's collection in Appendix to Brit. Journ. of Hom.) **6**, Dr. John Elliotson, *Lancet*, 1831 (2), p. 132, a family of eight or more were poisoned by Arsenite of copper, in and about the house, to which water had access; **7**, M. Raspail, *Med. Times*, vol. ix, 1843, p. 15, and vol. xiii, p. 324, Ghelen, poisoned, death in eight days; **8**, Raspail inhaled the gas for three days; **9**, Vogel, *Archiv des Verein* (abridged), *Dublin Hosp. Gaz.*, 1854 (1), 157, a man inhaled the gas; **10**, Dr. T. Monat, *Glasgow Med. Journ.*, vol. v, 1858, p. 371, Mr. R. inhaled it; **11**, M. Piorry, *Gaz. des Hop.*, 1863 (*Brit. Med. Journ.*, 1863 (2), 580), a man, æt. twenty-two years, imbibed a large amount; **12**, Dr. Dickinson, *Med. Times and Gaz.*, 1865 (1), p. 659, effects of inhalation; **13**, Dr. Valette, *Memoire*, Lyons, 1870 (*Tardieu, Etude Méd. leg. et Clin. sur Empoisonnement*, Paris, 1875).

Head.—Suddenly seized with vertigo, fainting, and vomiting, and died in eight days,⁷.—On the third day had vertigo and pains in the stomach, prostration of strength, cerebral congestion, fever, dim sight, indigestion, nausea, and griping,⁸.—Violent pain in the head (in one hour),¹¹.—Intense headache came on suddenly on the fourth day, followed by very violent pain in the epigastric region and renewed vomiting, with pale tongue and great thirst; the features became for the second time altered, and the sclerotic again became yellow; prostration very great,¹³.—Intense frontal headache (in five hours),¹¹.

Eye.—Sclerotic injected with blood of a very yellow color,¹³.—[80.] Sclerotic yellow,¹³.—Every one had watery eyes,⁶.

Face.—Expression like that of a person suffering from cholera,¹³.—Face and lips pale (in five hours),¹¹.

Mouth.—The gums became pale, discolored, and bled easily,¹³.—Tongue red and foul,⁶.—Blood seemed to ooze from the whole mucous membrane of the mouth, and accumulated on the anterior pillars of the palate, exhaling a nauseous odor,¹³.

Throat.—Constriction of the throat,¹³.

Stomach.—Thirst,⁶.—Great thirst,¹³.—[90.] Nausea and vomiting.⁶.—Vomiting (in four hours),¹¹.—Pain in epigastric region (in four hours),¹¹.—Feeling of heat of stomach,⁶.

Stool.—Bloody stool,¹³.

Urinary Organs.—Bloody urine,¹³.—On the ninth day the urine again became suppressed, and vomiting reappeared,¹³.—Hæmaturia,^{12 13}.—Urine deep red, almost black,¹³.—Urine black, bloody, scanty,¹³.—[100.] It caused blackish urine, depending upon altered blood-globules,⁹.—(Arsenic was detected in the urine),¹³.

Chest.—Constriction on the suprasternal notch,¹³.—Feeling of constriction at base of lung, and breathing was quickened (in five hours),¹¹.

Heart and Pulse.—Distress about the heart and stomach, followed by profuse vomiting,¹³.—Pulse small and rapid,¹³.—None had a pulse under 120, and in some it was 160,⁶.—Pulse 90,¹³.

Back.—Violent pain towards lumbar region (in five hours),¹¹.—Feebleness of the limbs continued for a long time,¹³.—[110.] Pains in the limbs,¹³.—After they appeared well they had pains in the limbs,⁶.

Generalities.—Blood exuded from the mucous membrane and from the prepuce; the blood was pale; I was scarcely able to call these exudations hæmorrhages, on account of the decolored character of the blood; the patient certainly lost as much as 300 to 400 grams of blood,¹³.—He soon had a sense of burning and constriction in the throat. Next day he was exceedingly ill. He had been suffering for several hours from excessive irritation of stomach, with an intense acrid burning sensation from the pharynx to the lower end of the alimentary canal. The vomited matter consisted at first of the food contained in the stomach, then of the bile which had evidently regurgitated into that organ, and ultimately of dark coffee-grounds-looking matter, which was ascertained to consist of broken-down blood corpuscles and the desquamated epithelium of the stomach and lower part of œsophagus. The bowels had been obstinately constipated, and there had been severe pains in the loins, accompanied with the discharge of between three and four pints of bloody urine. There was at this time (about sixteen hours after the poison) considerable fever, with a full, hard, frequent pulse, a dry, hot, unsperspiring skin, burning pain in the whole course of the alimentary canal, deep-seated pain in the lumbar region, intense restlessness, anxiety, and general uneasiness, pale, anxious face, and considerable prostration of the vital powers,¹⁰.—Very great restlessness,¹³.—Walked with difficulty (in five hours),¹¹.—Very great prostration,¹³.—Indefinable malaise,¹³.

Skin.—Eruption of papules upon the abdomen, face, and loins,¹³.—The eruption on the skin became violet in color,¹³.

Sleep.—[120.] After about four weeks the patient was attacked with somnolency; the face became of a bronzed hue, and the oozing of blood continued; afterwards the patient had repeated attacks of syncope, and soon after died,¹³.

Fever.—Body cold,¹³.—Skin cold,¹³.—General heat of body,⁶.—Profuse perspiration,¹³.

ARSENICUM IODATUM.

Authority. 3, Dr. A. T. Thomson, *Lancet*, 1838-9 (1), p. 176, experiments.

At first appetite is increased, but after taking it for ten or twelve days pain is felt at epigastrium, with thirst, dry state of throat, slight fever, and sometimes diarrhœa and tenesmus; the skin also becomes dry, and the urine is increased in quantity. If it is continued the nervous system becomes extremely irritable, and wakefulness supervenes.³

ARTEMISIA ABROTANUM.

Authority. 3, A. M. Cushing, M.D., *Trans. Mass. Hom. Med. Soc.*, 1866-70, vol. iii, p. 19, took 6 drops at 10.30 P.M. (first day); 8 drops at 10.35 P.M. (second day); 15 drops at 10.30 P.M. (third day); 15 drops at 10.30 P.M. (fourth day); 20 drops at 11 P.M. (fifth day); 25 drops at 9 P.M. (sixth day); 40 drops at 10 P.M. (seventh day); 25 drops at 12 P.M. (eleventh day); 50 drops at 10.30 P.M. (twelfth day); 100 drops at 9 P.M. (thirteenth day); 500 drops 1st dil. at 10 P.M. (sixteenth day); 1000 drops at 10 P.M. (seventeenth day).

Mind.—Very nervous (eighteenth day).³

Head.—In five minutes head felt as if squeezed on temporal regions (first day).³—Pain and fulness of the head (seventh day).³—Awoke in the morning with severe pain in the left temporal region, which continued all the forenoon (fourteenth day).³—Headache (sixteenth day).³

Eye.—Eyes smart in the evening; pain in left eye, could not open it for several seconds (fifteenth day).³

Ear.—Soon after dose, heard a noise like the humming of a bee; walked around the room to find it. When in bed it sounded like persons talking in the distance; on listening intently it disappeared, but would return as he turned his mind from it (eleventh day).³—Wind rushes out of right ear (seventeenth day).³

Nose.—Watery discharge from nose (seventeenth day).³

Mouth.—Mouth hot and dry, morning, on waking (fourteenth day).³.—Sore tongue and mouth all day (seventeenth day).³—Mouth dry and sore (twentieth and twenty-first days).³.—[50.] Mouth quite sore, confined mostly to gums near left upper molars (twenty-second day).³—Sore mouth, with increased saliva, more in the night (twenty-second day).³.—Soreness of mouth increased (twenty-third day).³—Mouth better (twenty-fourth day).³

Stomach.—Poor appetite (fifteenth, nineteenth, and twenty-second days).³.—Raises wind tasting of the plants (eighteenth day).³.—Evening, belching of large quantities of wind tasting of salt mackerel, though none has been eaten for months; cannot eat it (twenty-sixth day).³.—Nausea (thirteenth day).³.—Slight nausea, with eructation of large quantities of flatus, tasting strongly of the plant (first day).³.—Felt sick all the forenoon, better in the open air (fourteenth day).³.—Nausea and sour eructations (seventeenth day).³.—[60.] Nausea, burning, and soreness of the stomach, evening (seventeenth day).³.—Stomach very sour (eighteenth day).³.—Heat in stomach (eighteenth day).³.—Heat and pain at epigastrium, at night (twenty-second day).³

Abdomen.—Pain in region of liver and kidneys, of a sick, sore, faint, inexpressible nature, very peculiar, almost amounting to fainting. Unable to walk on the street (eighteenth day),³.—Pain in left hypochondriac region, with eructation of large quantities of flatus (twenty-fifth day),³.—At midnight got out of bed and walked around the room; bowels bloated so much it was difficult to walk or bend, and seeming as if the bowels could be kept from passing out at the anus only by keeping the legs close together (seventeenth day),³.—Bowels bloated and painful, at 10 P.M. (eighteenth day),³.—Pain in the bowels all night, with several stools (twenty-sixth day),³.—Pain and heat in the bowels (fifteen minutes after a dose, seventeenth day),³.

Stool.—[70.] Bowels costive for the third time in his life, when well (sixth day),³.—Urgent desire for stool; loose stool; another at 7 A.M. (twelfth day),³.—Bowels seemed costive, with loose stool (fourteenth day),³.—Bowels more costive than for years (sixteenth day),³.—Natural stool, at 9.30 P.M. (sixteenth day),³.—Urgent desire for stool; loose stool (eighteenth day),³.—Three loose stools in the forenoon, one in the evening (eighteenth day),³.—7 A.M., soft stool; 9 A.M., stool, with much straining; sensation as if it was large and indurated, though quite the reverse (twentieth day),³.—Urgent call and loose stool, at 6.30 A.M. (twenty-first day),³.

Urinary Organs.—At 2 P.M., hurried desire to urinate after stool (fourth day),³.—[80.] Desire to urinate (seventeenth day),³.—Urine profuse (twenty-fifth day),³.

Sexual Organs.—Pain in testicles and back (seventeenth day),³.

Respiratory Organs.—A sensation as of breathing hot air continued for two days (fifteenth day),³.—Difficult breathing (twenty-second day),³.

Chest.—Pain in left lung (thirteenth day),³.—Sore feeling in lower portion of left lung, morning, on waking (fourteenth day),³.—Pain in the base of both lungs through the day, with darting pain in limbs and ankles (sixteenth day),³.—Severe and sore pain in both lungs (twenty-fifth day),³.—Pricking pain in right side of chest (thirteenth day),³.—[90.] Burning through right side of chest (twenty-second day),³.—Pain just below the heart, followed by a crawling sensation and eructations (seventeenth day),³.

Pulse.—Pulse quick (seventeenth day),³.

Neck and Back.—On waking, very lame, worse in back; muscular soreness on motion, with severe pains in the back of the neck, shoulders, right side of the chest, and limbs; the right hip was so lame as to cause limping for some time (fourteenth day),³.—Severe pain all day in the side and back of the neck and shoulders, limbs, back, and hips; arms and hands feel numb (fifteenth day),³.—Strange pulling sensation of the muscles of the right side of the neck beneath the angle of the jaw (half an hour after a dose, sixteenth day),³.—Back quite lame (eighteenth day),³.—Back lame and painful (twenty-first day),³.—Heavy pain in lumbar region, extending to both testicles, 5 P.M. (twenty-third day),³.—Pain in back and testicles (twenty-fourth day),³.—[100.] Pain in back, hips, and knees, afternoon (twenty-sixth day),³.

Extremities.—Limbs very weak (twenty-second day),³.—Weak, numb feeling of arms and limbs (thirteenth day),³.—Sore feeling in all the limbs, mostly in the joints, morning, on waking (fourteenth day),³.—Pain all day in shoulders, arms, and hips (eighteenth day),³.—On waking, both arms, legs, and feet were very lame and painful, but relieved after motion.

In half an hour right hand so lame as to be useless (twenty-third day),³.—Joints all sore and lame (twenty-seventh day),³.

Superior Extremities.—Feel as if both arms were tied to the body (twenty-sixth day),³.—Right arm lame and weak (twenty-second day),³.—Severe aching pain in both axillæ, as if a sore were forming (tenth and eleventh days),³.—[110.] Pain in shoulders (eighteenth day),³.—On waking early, *sharp pain* in left shoulder (twenty-fifth day),³.—Both shoulders lame and sore, on waking, in the morning (twenty-sixth day),³.—Seized when riding with lameness and aching of left arm above the elbow, on outer and under side; arm lame all day (twelfth day),³.—1 A.M., while riding, severe pain in the left arm above the elbow (fourteenth day),³.—Pain above right elbow, afternoon (twenty-second day),³.—Severe sore pain just above the left elbow, at 11 P.M. (twenty-second day),³.—The pain is all in arms just above the elbow (twenty-sixth day),³.—Pain in right elbow all the forenoon (twenty-fifth day),³.—Pain in left elbow and right hand (twenty-fifth day),³.—[120.] Right hand lame, so as scarcely to be used (nineteenth day),³.—Left hand so lame he could not sit still, 10 A.M. (twenty-third day),³.—Hands painful and sore all day; handles everything with difficulty (twenty-fourth day),³.

Inferior Extremities.—Pain in both hips, severe in right hip and thigh (sixteenth day),³.—Aching pain all day across the hips (seventeenth day),³.—Both hips and legs so lame that it is difficult to walk (twenty-second day),³.—Both legs lame and painful, from hips to knees; they feel very sore, but are not sore to the touch (twenty-second day),³.—Lame, aching pain on the inside of the right knee, then on the outside of the left knee (sixth day),³.—Right knee and ankle very weak (eighteenth day),³.—Right knee lame and painful in the morning (twentieth day),³.—[130.] Sore pain in knees, first the right then the left, in the evening (twenty-second day),³.—Both knees lame, 11 A.M. (twenty-third day),³.—Pain in both knees (twenty-fourth day),³.—In the evening, sore lameness of head of left fibula, so severe as to cause lameness when walking, at three different times (twenty-first day),³.—Legs and feet lame and painful (seventeenth day),³.—Very sudden pain in legs (eighteenth day),³.—Evening, both legs weak, both hands painful, and so lame as hardly to be used (twenty-third day),³.—Ankles and legs so painful he could not sit still while examining a patient, 11.30 A.M. (twenty-third day),³.—Soon after taking dose pain in the left, then the right leg, at the middle of the tibia (seventh day),³.—Aching pain in the ankles and feet, worse on the outside of the left ankle (seventh day),³.—[140.] Pain in ankles and knees; the feet are lame and painful (eighth to eleventh day),³.

Generalities.—During proving lay very straight in bed (usually lie with feet drawn up),³.—Trembling all over (five minutes after dose, seventeenth day),³.—While proving remedy, often unconsciously dropped reins when driving (nineteenth day),³.—Weak and lame in the forenoon (eighteenth day),³.—In the afternoon severe pains; obliged to lie down; very sleepy, could not sleep; not able to attend to patients (fourteenth day),³.—Itching, then darting pains in different parts of the body, most in lower lobes of both lungs, and in the legs below the knees (eleventh day),³.—Darting pains in various parts of the body, most severe in right arm, above and near elbow-joint, in the forenoon (twenty-second day),³.—Darting pain in various parts of the body and limbs (twenty-fifth day),³.

Skin.—The old eruption feels sore, with violent pricking itching, ex-

tending to the head and arms (seventh day),³.—[150.] A small scratch made a very large sore. After proving the old eruption returned, but was not so severe as before, and was easily cured by Rhus tox. 200th, and has not returned,³.—Slight itching of the limbs, but no eruption (twenty-second day),³.—Intolerable itching of a corn on the second toe of the left foot (sixteenth day),³.—Very severe itching of corn on left foot (seventeenth day),³.

Sleep.—Yawning and eructation all day (twenty-second day),³.—Sleepy all day (eighteenth day),³.—Restless sleep, with springing up, and constant jumping and thrashing of the arms (seventeenth day),³.—Restless sleep (twentieth day),³.—Very restless night, with heat and pain at epigastrium (twenty-first night),³.—Unrefreshing sleep (twenty-second night),³.—[160.] Had frightful dreams; awoke frightened and trembling (fifth day),³.—Frightful dreams of mad dogs, etc. (fourteenth day),³.

Fever.—Chilly in a very warm room (twenty-third day),³.—Feels too warm in a cool room (seventeenth day),³.

ASAFETIDA.

Authority. 7, E. W. Berridge, *The Organon*, vol. ii, p. 258, Mr. —, at. twenty years, took some ethereal tincture of Asafoetida.

He at once felt as if he could not remain indoors, but must walk about in the open air, with apprehension, feeling as if the heart would burst, and quick breathing; for two days there were violent palpitation of heart and excitement of mind. Since then he has had, from time to time, the following symptoms, which he never had before. (The symptoms are given in groups, just as he from time to time reported them.)

At night, when lying on back, has palpitation and suffocative feeling, and as if the heart would burst; he must sit up, which relieves him. Fits of low spirits. Heart sometimes beats very feebly.

Rush of blood to head, and increased action of heart on the slightest excitement.

Palpitation, with faintness, rush of blood to head, flushing of face, anxiety, and slow breathing, from excitement.

Attacks of faintness, followed by fluttering of heart, with the faintness, sweat on small of back, hot and cold alternately, and trembling. Feeling of suffocation in throat on taking a full inspiration.

Attacks of faintness, with anxiety, as if he would die, and with one attack desire for suicide. With the faintness, shivering and very feeble action of the heart. Feeling as if the heart were swollen, preventing a deep inspiration. Restless, must walk about. Dislike for solitude. At times heart feels bound together tightly, as if it could not beat; afterwards this was felt only on exertion or walking.

Shooting from just below left nipple through to back, on walking.

Faintness on beginning to eat, especially at dinner, with full and frequent beating of heart, with the faintness, anxiety as if he would die, alternate heat and chill, sweat on small of back, and trembling.

Faintness, with quick pulse; the faintness is worse the day after a seminal emission (to which he was subject before he took the drug).

After meals, flatulent distension of abdomen, making heart beat very feebly, with faintness.

Woke in night with distension of stomach, pain across chest, and feeble heart.

Dull pain and fulness in left side of head, with bleeding from left nostril, and heart beating slowly.

Fulness and throbbing in head, heart beats feebly, and apprehension.

Fulness of head when riding in a carriage, with feeling as if nose were stopped up high up, so that he cannot breathe through it.

Heart's action is quickened by a deep inspiration.

Moving arms makes heart beat quickly. Sometimes heart beats short and quick, at other times he feels as if there were no action of it; with the heart symptoms, fear of death. Low-spirited between the heart attacks. These heart symptoms and faintness worse after seminal emission. With one attack of faintness there was shaking of the limbs, and as if the bowels shook. The faintness is brought on by noise, on being in crowded streets.

If he sleeps on left side, he wakes up feeling faint, and with slow action of heart.

Fears paralysis or softening of brain.

Continual pain about region of heart, with slight oppression of breathing; the pain temporarily relieved by eructations.

At times slight inclination to faint, accompanied by great apprehension.

If he thinks of having taken the drug, it brings on the faintness.

When faint, if he breathes deeper, the heart beats fuller and the faintness decreases; if he holds the breath, the heart becomes very feeble.

Faintness and feeble action of heart. Inability to walk fast or uphill. Apprehension. Depression. Occasional tingling in legs after much walking. Faintness is worse after seminal emissions. Cold sensation in head.⁷

ASIMINA TRILOBA.

Authority. 3, H. W. Taylor, M.D., Cincin. Med. Advance, vol. vi, 1878, p. 25.

Five children ate freely of the pawpaw, without being fastidiously nice as to the ripeness or greenness. Next morning they seemed a little languid and pale, but the pawpaw eating went on. About 10 P.M. I found my only boy, yet two years and six months, with a violent fever. He had vomited awhile before I arrived, and I found that he was covered with a bright scarlet eruption. His pulse was 130, full and steady, and at 10.30 the thermometer, remaining in the axilla ten minutes, showed a temperature of 105°. Among the vomited ingesta were many small pieces of unripe pawpaw. The next day the eruption remained in full blush, the temperature dropped to 104°, the fauces were red and swollen, the tonsils and submaxillary glands were considerably enlarged, and a diarrhœa of yellowish discharges set in. Each day the temperature dropped until it was normal; a general desquamation of the cuticle took place, and a carbuncle formed on the anterior aspect of the left thigh, and was two weeks finishing the process of suppuration. The diarrhœa continued more than four weeks, although many remedies were given to check it or control it.

He complained of frontal headache, soreness of the throat, and nausea. The eruption in all its phases, the fever, the diarrhœa, were much like

some cases of scarlet fever. All the other children had the eruption on the neck and upper extremities; all had diarrhœa, lasting a long time after the other symptoms had disappeared,³.

ASPARAGUS.

Authorities. 5, M. Gendrin (Gaz. Med. de Paris, June, 1833), Am. Journ. of Med. Sci., vol. xiii, 1833, p. 241, effects of the syrup on several persons; 6, E. W. Berridge, M.D., Am. Hom. Obs., 1875, p. 101, effects on Mr. —, after eating Asparagus.

All without exception had the quantity of their urine increased, and this commenced when the syrup was given in the dose of an ounce to an ounce and a half, but was not marked until two ounces of the medicine was taken at a dose. When taken in this dose the urine tripled, quadrupled, and even quintupled the quantity of drink in all the individuals. When this abundant diuresis was established, the greater number of these persons experienced thirst, and all had an increase of appetite. M. G. repeated these experiments upon three series of persons, consisting of three, of five, of four. The day after the Asparagus was suspended, the diuresis ceased.⁵ —After eating Asparagus his urine smells like cat's urine.⁶

ASTERIAS RUBENS.

Authority. 8, E. W. Berridge, M.D., N. Y. Journ. of Hom., vol. ii, p. 460, Mr. — took several doses of 200th (Leipzig).

Dull headache in occiput for thirty minutes, one hour and a half after breakfast; it came and went suddenly. Dull occipital headache, lasting all day, commencing one hour after breakfast.⁸.

ASTRAGALUS MENZIESII.

Astragalus Menziesii, Gray.

Natural order, Leguminosæ.

Authority. J. M. Selfridge, Trans. Pacific Hom. Med. Soc., 1874-76, p. 178.

Ate some of the green leaves at 4.30 p.m. In fifteen minutes I experienced a slight burning sensation in pharynx, œsophagus, and stomach. At 5 p.m. a feeling of fulness in right temple and superior maxillary bone; also slight nausea, accompanied with shivering and chilliness, such as frequently precede or accompany nausea; 5.20, experienced occasional attacks of dizziness, with fulness of the head; 5.45, felt weak; arms felt as if trembling; 6.30, still felt weak, with a sense of emptiness in the stomach; 7 p.m., ate a light supper, which did not remove the weakness, although the feeling of emptiness was relieved. Had a pressive pain in both temples, which lasted until 9 o'clock; 7.30, felt as if my nerves were all trembling; 9.15, had a slight pain in left superior maxillary bone, followed by a feeling of pressure, which continued but a minute or two; 9.20, aching in the

right superior maxillary, with a sense of pressure in both bones ; also slight pain in the masseter muscles. Restless sleep after midnight. Frequently disturbed sleep, with dreams of quarrelling. Had a stool at 7.15 A.M., an unusual hour ; loose, like diarrhoea, with burning and tenesmus ; 8 A.M., slight burning at anus, recurring occasionally ; 9.15, occasional feeling of tenesmus.

ARUM DRACONTIUM.

Arum Dracontium, Linn.

Natural order, Araceæ.

Common name, Green Dragon or Dragon-root.

Authority. C. P. Hart, M.D., *Am. Hom. Obs.*, 1875, p. 537.

A little over 1 ounce of the expressed juice was mixed with 9 ounces of pure saccharum lactis, marked "matrix." Of this a 1st dec. trit. was prepared in the usual manner.

July 6th. Prover, æt. thirty-six years, took 10 grains $\frac{1}{10}$. At 2 P.M. pulse 74, full, soft, and regular. In five minutes felt a peculiar acrid sensation in the mouth and throat, but not sufficiently marked to be unpleasant. The heart beat so violently as to shake the walls of the chest. Pulse 80, full, hard, and somewhat jerking.

2.15 P.M. Tingling or slight stinging sensation in the fingers and toes, as when the circulation is impeded. Pulse 80, small and irregular ; artery seems to roll under the finger, and requires considerable pressure in order to be correctly counted.

2.45 P.M. Fine tingling sensation all over right hand, which is warmer and redder than the left, and appears somewhat swollen. Pulse 80, moderately full, and more regular.

7 P.M. Shooting pain in the left anterior inferior triangle of the neck, near the clavicle ; aching pain in the left forearm, left hand, and right humerus. Pulse 74, full, and nearly natural, but rather weak and irregular.

7.20 P.M. Sharp shooting pains at the styloid process of the right ulna ; right hand still remains somewhat red and swollen. Retired to rest at 9 P.M., and slept soundly till 7 A.M. Head feels heavy and aches slightly in occipital and right parietal regions. Throat feels somewhat raw, and there is rattling of mucus in the larynx at every full *expiration*, but this disappeared after rising and moving about.

July 7th, 8 A.M. Half hour after breakfast shooting pains in the right ear ; they are transient but frequent, and leave a feeling of fulness and slight aching in the middle ear.

9 A.M. Took 15 grains "matrix." Late and insufficient stool.

9.15 A.M. Eructation of flatus from the stomach ; fine tingling or pricking sensation in the hands and feet, especially the right ; shooting pain down the right thigh ; flushing of the hands and face ; heart's action increased, but not as violent as after taking the first decimal preparation yesterday ; aching in the right humerus.

9.35 A.M. Copious semifluid stool, with much flatus ; also eructations tasting of the medicine ; small accumulation of mucus in the throat, the raising of which, by coughing, produces a slight mucous rattling in the larynx ; disposition to swallow, arising from excess of mucus, but no unpleasant acrid sensation in the throat, as I had expected.

10 A.M. Pulse 74, full, soft, and regular. Feeling of warmth and fulness in left middle ear, similar to what was felt at 8 A.M. in the right, but no shooting pains; probably this symptom arises from an accumulation of mucus in left Eustachian tube.

10.20 A.M. The ear symptom has changed sides; warmth and fulness now in the right ear; left ear normal. The disposition to swallow has subsided, but has left a slight uneasiness in the throat, and a disposition to cough. The act of swallowing develops a slight soreness in the muscles of the throat, and renews temporarily the feeling of warmth and fulness in the ears, sometimes in one and sometimes the other, seldom in both at once. I am satisfied that the throat and ear symptoms, with the exception of the soreness, are owing to an excess of mucus in the throat, larynx, and Eustachian tubes.

3 P.M. Increased soreness of the larynx, and greater disposition to cough; burning of the soles of the feet; heat, dryness, and smarting of the eyelids; fine shooting pain in the course of the left spermatic cord.

5 P.M. Preternatural heat in the palms of the hands; loose cough, with soreness of the throat, closely simulating a mild attack of catarrhal angina; the soreness is not very marked, except during the act of deglutition; there is a feeling of dryness and smarting in the throat, a kind of rawness, with a sense of fulness, not really painful, but sufficiently annoying to attract constant attention, and producing a continual disposition to clear the throat by swallowing, coughing, or hawking.

9.30 P.M. Retired to bed and slept well the first part of the night, but awoke about midnight with great oppression of breathing, a kind of asthmatic attack, which, however, soon passed off, leaving considerable rattling of mucus in the larynx and upper part of the trachea. Noticed that the rawness in the throat and the soreness in the laryngeal region, which were present on retiring, had almost entirely disappeared. Slept badly the rest of the night. In the morning raised by coughing a small amount of mucus. No rattling of mucus at this hour (7 A.M.) except by forced *expirations*; the undue secretion is now limited to the larynx, but can be distinctly heard whenever the expirations are prolonged.

July 8th, 8 A.M. Natural motion of the bowels; no flatulence.

9 A.M. Took 30 grains "matrix."

10 A.M. Occasional emissions of flatus from the stomach; ear symptoms as before noted, but not so marked; fine pricking or tingling sensations in the feet and hands, for the last half hour, began in right foot, and afterwards affected in regular succession the right hand, left foot, and left hand; occasional shooting pains have occurred during the same time in the following order: right malar region, right external malleolus, then eminence of right thumb, left malar region. Pulse 84, small and somewhat irregular. Occasional shooting and aching pains along the right humerus and right thumb.

10.30 A.M. Aching pain behind the right ear; also in the right shoulder; slight aching pain in the precordial region and down the left arm; also in the right forearm and over the left eye; these pains are all very transient.

11 A.M. Pain in the bowels caused by incarceration of flatus; escape of flatus from stomach and bowels.

12 M. Aching pain along the outer aspect of the left foot; immediately followed by a similar pain in the corresponding part of the left hand; shooting and aching pains in the left brachial plexus of nerves.

NOTE.—Most Arum pains are observed to be very transient in any one part, and to course along the extremities, sometimes in one direction, sometimes in the opposite one; they are not very sharp, and are generally intermediate in character, between aching and shooting. Those in the nervous trunks partake more of the shooting character, but always leave an aching sensation behind them. I have not been entirely free from these pains longer than a few minutes at a time, for more than two hours, having noted down only the most prominent. At first they were almost entirely confined to the right side; now they are limited chiefly to the left. I have just had one of these characteristic pains in the left side of the head; it began in the left occipital region, gradually subsided, and reappeared successively in the left temporal and left frontal regions. This remedy acts primarily and pre-eminently upon the nervous system, and through it upon the circulation.

12.30 A.M. Pulse 74, full, soft, and slightly irregular.

4 P.M. Have an irresistible desire to pass urine, which is diminished in quantity, very highly colored, and has a burning or smarting effect on the urethra.

6 P.M. Great languor and depression of spirits; dull, heavy aching in the chest; sinking feeling at the pit of the stomach; aching along the spine, particularly between the shoulderblades and in the lumbar region; great weakness across the loins; feeling of extreme prostration.

NOTE.—The urine subsequently passed normal both in amount and character. The symptoms last mentioned continued to increase until the exhaustion became so great that I was compelled to retire at the early hour of 8 P.M. At this time there was a slight perspiration upon the neck and breast, the first that has appeared during the proving.

July 9th. Awoke at 6 A.M. greatly refreshed. Found myself quite hoarse; expectorated a small quantity of thick mucus; throat raw and tender; rattling of mucus in larynx during *expiration*, but which ceased on rising, except when the expirations were prolonged by voluntary effort. Conjunctivæ highly injected; lids dry, stiff, and slightly agglutinated at their edges, which burn and smart.

NOTE.—The proving was continued through the month, with the development of but few additional symptoms. The bowels were somewhat irregular, at one time slightly constipated, at another somewhat loose, but never any decided diarrhoea. Paroxysms of dyspnoea would sometimes occur, with much aching in the chest, and always associated with a considerable secretion of mucus in the larynx and trachea.

On the 10th, and also on the 17th, shooting pains in the right ear, sometimes very severe.

On the 23d an aphthous ulcer appeared on the tongue, and on the following day the mouth and throat became so sore that the proving had to be discontinued. It was resumed, however, on the 25th, by taking one drachm of "matrix;" this produced a violent asthmatic attack at night, and lighter ones on each succeeding night for about a week, when they left

me altogether, but I still have (August 1st) an annoying cough, and a mucous rattling in the larynx, which indicate that this will prove to be a valuable remedy in laryngeal, bronchial, and pulmonary complaints.

August 1st. Took one drachm of the "matrix." Immediate effects similar to those already detailed.

August 3d. Deep shooting pains in the right ear; cough from laryngeal irritation, worse at night and when lying down; constant rawness of the throat, hoarseness, and rattling of mucus in the larynx.

August 4th. Similar symptoms, the shooting pains in the right ear occurring frequently, and continuing sometimes for ten or fifteen minutes.

August 5th. Similar symptoms, the ear pains being still persistent.

August 6th. Symptoms continue as before, with occasional shooting pains also in the *left* ear.

August 7th. No change in symptoms, except that I have had three copious bilious passages from the bowels, attended with aching in the abdomen and burning in the rectum.

August 8th. Bilious diarrhœa, borborygmus, and the escape of much flatus from the bowels.

August 9th. Bowels regular; slight burning in urethra after micturition.

August 12th. No marked change in symptoms until last night; coughed all night; in the morning had a very bad taste in the mouth; tongue and mouth coated with a foul slimy mucus, having a putrid taste; but the most important symptom was a *purulent expectoration*, consisting of *thick, heavy, yellowish-white pus*.

August 16th. Since the 12th instant I have continued to raise this purulent secretion from the larynx in large quantities. Last night I was so annoyed by the gravity and persistence of the laryngeal symptoms—violent cough, hoarseness, rawness of the throat, and profuse purulent expectoration, which greatly alarmed my wife—that I took a dose of Spongia 3d x, which so far relieved me as to secure a good night's rest, the first I have had since the 12th instant.

August 17th. Frequent copious emissions of limpid urine.

August 18th. Inclination to urinate every hour or so during the day; urine increased to four or five times the normal amount; tenderness and slight smarting or burning of the orifice of the urethra, especially during micturition. Eruption of pimples, a species of lichen, on the nose, and a patch of urticaria on the right arm near the elbow.

NOTE.—During the proving, *i. e.*, for the last four or five weeks, I have been entirely free from an intolerable itching of the scrotum—a chronic pruritus—of ten or twelve years' standing. I have also noticed during this time a great diminution, and most of the time an entire absence of, the sexual desire, penis flaccid and relaxed. This condition of the generative organs and a slight laryngeal irritation are the only pathogenetic symptoms remaining at this date (August 22d).

ATROPINUM.

Authorities. **30**, Dr. Chassaignac (Gaz. des Hop., January, 1853), Am. Journ. of Med. Sci., vol. lii, p. 540, 3 or 4 drops of a solution made with 5 centigrams of Atropine in 30 grams of water, acidulated with acetic acid, were dropped into the eye of a man suffering with cataract; **31**, Dr. Bethune, Bost. Med. and Surg. Journ., vol. lvi, 1857, p. 201, made three successive applications to the eye, of a solution of 2 grains to the drachm; **32**, M. T. Saddler, M.D., Med. Times and Gaz., 1868 (1), p. 391, a child, aged three months, took a teaspoonful of a mixture containing $\frac{3}{160}$ grain of the sulphate in a fluid drachm, afterwards 6 drops; **33**, Geo. Lawson, Lancet, 1868 (1), 570, effects of the application of the sulphate to the eyes of two persons; **34**, S. R. Percy, M.D., Prize Essay, 1868, p. 15, took $\frac{1}{160}$ grain of the sulphate in 1 ounce water; **35**, S. W. Gross, M.D., Am. Journ. of Med. Sci., Oct., 1869, p. 401, Mrs. H., aged forty-three, took 3 grains of Atropia, death; **36**, F. H. Parsons, M.D., Brit. Med. Journ., 1869 (2), p. 675, a man, aged forty-five years, swallowed less than 2 drachms of a solution of the sulphate; **37**, A. W. Stocks, Brit. Med. Journ., 1870 (1), 489, for an attack of lumbago, made a hypodermic injection of 6 minims of a solution containing 1 grain alkaloid to 2 drachms water, with relief, afterwards used the same quantity obtained from a different druggist; **38**, Drs. Millick and Kerper, Med. and Surg. Reporter, vol. xxvi, 1872, p. 257, a lady, for rheumatic iritis, took a solution containing about 1 grain Atropia, and immediately drank hot coffee; **39**, S. Buckley, Pharm. Journ., Third Series, vol. ii, 1872, p. 597, Mr. A. Harris, took some Atropia in food, death; **40**, Roderich Zeiss, Ueber die Wirkung des Atropins auf den Puls., Jena, 1875; **41**, Dr. Hugo Magnus, Zehender's Klin. Monatsbl., 1876, p. 386, Royal Lond. Oph. Reports, 1877 (Am. Journ. of Med. Sci., New Series, No. 150, p. 569), effects on the eye; **42**, T. E. Murrell, M.D., Phila. Med. and Surg. Rep., Sept., 1876, p. 269, a man, aged forty years, took a solution of Atropia; **43**, Henry Gibbons, M.D., Pacific Med. and Surg. Journ., 1876, p. 466, a child, aged three years, took an indefinite quantity of a solution; **44**, R. L. Bowles, M.D., Brit. Med. Journ., 1876 (1), p. 533, dropped 4 drops of a solution of 4 grains to 1 ounce, into two persons' eyes; **45**, E. Nettleship, *ibid.*, p. 444, a woman, aged forty four years, for iritis, applied a solution of the sulphate, 4 grains to 1 ounce, several times a day to the eye; **46**, J. Oscroft Tansley, Med. Rec., vol. xii, 1877, p. 334, a young woman, with tinnitus aurium in one ear, was given a solution of the sulphate, 4 grains to 1 ounce, to be instilled into the ear daily; **47**, same, a woman applied a plaster to the right side; **48**, E. Wilson, Lancet, 1878 (1), 165, a woman, aged forty-three years, and her daughter, aged thirteen years, drank a lotion containing 3 grains of the sulphate; **49**, A. S. Greenway, M.B., Brit. Med. Journ., 1878 (2), p. 516, Chas. S., aged forty-five years, took over a teaspoonful of Atropia; **50**, J. C. Mackenzie, M.D., Cincin. Lancet and Obs., Feb. 1878, p. 148, A. C. H., aged twenty-six years, took 20 grains of the sulphate; **51**, F. C. Holts, M.D., Chicago Med. Journ. and Examiner, vol. xxxviii, 1879, p. 43, a man, aged seventy-two years, applied a solution of Atropia to the eye for several days.

In twelve days she returned considerably disturbed in mind, saying she could not see well with the eye upon the *same side* as the ear in which the Atropia had been used. It was examined and found to be strongly under the action of Atropia, the other eye being normal.⁴⁶—Acute glaucoma;

the Atropia was dropped in to facilitate a proper examination of cataract. The right eye only was affected, though the drops had been put in both. The patient had been seen on two occasions before the Atropia was used, and there was no occasion to suspect any glaucomatous condition. The symptoms came on within a few hours of the drops being used.⁴—In one case there was acute conjunctivitis, lasting several days; in the other, erysipelas of the lids, spreading to the face and head, was excited on two occasions, a period of six months intervening.³³—In four or five days she began to have difficulty in seeing with her *right eye*, being the eye upon the same side of the body to which the plaster had been applied. Upon examination the pupil was seen to be considerably enlarged, and the eye was undoubtedly strongly under the action of *belladonna*, the left eye being normal.⁴—[520.] Dr. Rothhaupt, aged twenty-five years, whose normal pulse was 60 to 64, at this time 64, injected 0.00025 gram Atropia; pulse gradually fell in five minutes to 52; during the next twenty minutes it fluctuated between 50 and 60; after twenty-six minutes it was 48; it slowly but gradually rose, until after an hour it regained its normal rate, and after an hour and a quarter continued regular at 60. Another man, aged twenty-five years, with pulse constantly at 68, took 0.0005 gram; after seven minutes pulse 60; after thirty-three minutes 68; thirty-eight minutes 72; sixty-two minutes 78; seventy-seven minutes 78, where it remained constant. K. R., aged forty-six years, injected $\frac{1}{4}$ milligram; pulse rose to a maximum of 70 beats. R. Z., aged twenty-five years, with a pulse of 60; rose to a maximum of 68. B., aged twenty-five years, pulse 64; rose to a maximum of 74. O. Z., aged twenty-one years, pulse 60; rose to a maximum of 80. The same prover, K. R.; the pulse fell after ten to twenty minutes 10 beats. R. Z., the same. B.'s fell 10 beats in one to ten minutes. O. Z.'s fell 6 beats in ten to twenty minutes. Another series of experiments with 0.00075 gram; pulse 62, fell after twelve minutes to 48; after thirty-nine minutes it was 78; after forty-nine minutes 86; after which it gradually returned to the normal. Same man subsequently injected 0.001 gram (or 1 milligram), pulse 60; in seven minutes and three-quarters it fell to 52; after thirty minutes it was 102; after which it returned to the normal and did not fall below it. Another proving, with $1\frac{1}{2}$ milligram; pulse 68; in twelve minutes 52; in forty minutes 104; after which it gradually returned. After an injection of $\frac{1}{4}$ milligram, the maximum fall of the pulse was reached in twenty-six minutes, and lasted fifty minutes. After $\frac{1}{2}$ milligram the maximum was reached in sixteen minutes, and lasted forty-one minutes; after $\frac{3}{4}$ milligram the maximum fall was reached in thirteen minutes, and lasted twenty-one minutes. After 1 milligram the maximum fall was reached in seven minutes and lasted fourteen minutes. After $\frac{1}{4}$ milligram there was no rise in the pulse. After $\frac{1}{2}$ milligram the maximum was reached in eight minutes, and it lasted fourteen minutes. After $\frac{3}{4}$ milligram the maximum rise was reached in twenty-six minutes, and lasted one hundred and nineteen minutes. After 1 milligram the maximum rise was reached in forty-two minutes, and lasted one hundred and sixty-four minutes.¹⁰—In half an hour vertigo occurred, with wanderings of vision. In three-quarters of an hour all the symptoms of poisoning with *Belladonna* were present, flushed face, enormously dilated pupils, and incessant hallucinations. The patient drew his coverings over him, and attempted to seize objects that he saw in the air. On attempting to rise his legs failed under him, and he could not take two steps without being assisted. His pulse was 120 and full. In the evening he became

more calm, but the bladder was distended, and he was unable to empty it, so that the catheter had to be used. He lost all recollection of his illness except his delirium and its accompaniments.³⁰—Delirium, uncertainty in his gait, with absence of sleep and difficulty of swallowing. On the day after but one, he had another attack of delirium, somewhat resembling delirium tremens, seeing imaginary persons in the room,³¹—It had a distinct persistently bitter taste, and produced a numb sensation upon the tongue, somewhat similar, though less in degree, to that produced by aconite. In about ten minutes it produced a sense of nausea, which continued to increase until an effort was made to vomit. Although the effort at vomiting was made several times, nothing was thrown up. To this intense thirst succeeded, and a frontal headache, which was lessened by closing the eyes. Next a dryness was felt in the throat, and the tongue and mouth felt dry and feverish. These symptoms were not relieved, and only mitigated for a short time, by drinking water. This dryness of the throat increased, and was persistent for several hours, causing at first almost constant deglutition, and towards the last a strong effort to avoid deglutition, which had become painful. During the first two hours the pulse was less frequent, but afterwards became smaller and more rapid. The eyes soon lost all control of distance; a printed book held at the usual distance was a perfect blur; held at a long distance, letters could be distinguished, but the words upon looking at them, soon ran into confusion. Objects at a distance could be plainly seen, even a little more plainly than natural (hypertrophia), but near objects, though for a moment distinguished, soon lost their distinctness. A numb or crawling sensation, a formication, was felt down the back, upon the arms, and back of the hands. This formication was intense and very unpleasant upon the palate. Light became unpleasant to the eyes, causing pain deep in the eyeballs. Motion became unpleasant, and if the feet were lifted in walking, the floor seemed to glide from them before they again were put down. A sliding of the feet along the floor seemed to be the only safe way of locomotion. The head began to be dizzy, and for fear of falling it was necessary to be seated in the easy chair. Thirst at this time was very great, but only little water could be taken at a time, as the effort of swallowing was unpleasant. A languid feeling came on, as the semirecumbent position was assumed, and whether sleep, accompanied with wild dreams, or waking hallucinations followed, it was impossible to tell. Whether the brain was troubled with hallucinations, or with wild fantastic dreams, they were exactly the opposite of those produced by *Cannabis indica*, for all the imaginations and conversations were of the long past, none of the future. Whether there was total blindness, or merely an imagination of blindness, could not be remembered; but, if there was blindness to the external eye, the mind saw all its images with great distinctness, and the impress of them was left with vividness. There was consciousness of individuality, but the actions were performed by others, who were embodied spirits of those long since departed. Lengthy conversations of a most pleasant character were held with Plato, Alcibiades, Aspasia, and others. How long this state lasted cannot be told; but sound, profound sleep must have followed, for consciousness to external objects did not return till sixteen hours after taking the Atropia. Awakening took place suddenly; there was no pain, no headache, nothing abnormal but a languor and disturbed vision. The bladder had not been emptied during these sixteen hours, and although a large quantity of water had been drunk, but a moderate quantity of urine was

passed. The vision was not clear for several days,³⁴.—In about twenty minutes her hands were tremulous and her eyes closed; but she was quiet and became drowsy. In a few minutes the agitation increased, until it became more violent; she at the same time kicking out her feet and throwing her arms forward. On attempting to move her to her bed, it was found that her limbs were powerless, and that she was unable to stand, so that she had to be carried. Her face was very much flushed. In a few moments a meddlesome and pleasant delirium set in, in which she picked at her clothes, tried to get out of bed, and imagined she was sewing, or nursing her child, or engaged in shopping with her sister. These hallucinations lasted for about ten minutes, when she sighed and yawned repeatedly, and “dropped into a comfortable sleep;” the interval between the taking of the medicine and the sopor having been rather more than one hour; after three hours’ unconsciousness, and laboring under a heavy stupor. The eyes were closed, the pupils dilated, and the muscular system was greatly relaxed, excepting a condition of trismus, which was well marked, and deglutition was almost impossible. The respiration was labored and very much like that of an intoxicated person. The pulse was quite good, but neither it nor the respiration was counted. Countenance somewhat livid. Lids closed, conjunctivæ slightly injected; eyes had a fixed and brilliant stare. The tongue, roof of the mouth, and soft palate were glazed and parched,³⁵.—Pupils dilated. Excessive dryness of mouth and throat, with a sensation of burning and choking. Great difficulty in swallowing. Pulse 130. Great dizziness, and a sensation of weight on the top of the head and over his eyes. Frequent rigors and loss of muscular power, being unable to walk, or as he expressed it, “to feel his legs.” Very restless and agitated. Great difficulty in articulation. Micturition accomplished only after some trouble,³⁶.—In less than five minutes, I became aware that I had an overdose; my heart began to labor heavily, and to my feelings, roughly, at the rate of about fifty per minute, accompanied by a sore feeling immediately over the base of the heart. This continued about ten minutes, and was immediately followed by intense thirst, dryness of the mouth and throat, with great perversion of sensation, everything tasting intensely acid. The skin of my whole body began to feel turgid and swollen, and in about an hour and a half was covered with a rash precisely similar to that of scarlet fever. There was also diplopia; during the evening I was completely unable to read the newspaper. Next morning there was power to read with one eye at once; and in the evening the disturbance of vision had entirely gone, as well as all other signs of the action of the drug,³⁷.—Insensible and comatose. Pupils largely dilated. Face flushed and swollen,³⁸.—In a state of intense excitement; skin greatly congested; face, hands, and whole body swollen and bloated; mind delirious; sensibility suspended; violent clonic spasms at times of the limbs; pupils dilated to their fullest extent; intense thirst; speech thick and clogged; tongue and throat swollen (after two hours),³⁹.—In one hour, face flushed, full, strong, hard, and bounding pulse, almost stertorous breathing, with much somnolency, and great impairment of all the senses. When aroused and raised up he would look wildly around, and when addressed in a loud voice would mutter some incoherent words. There was great muscular tremor, and muscular weakness, particularly of the lower extremities, insomuch that he was unable to stand when aroused, although at the same time he exhibited considerable strength

in his arms. He passed his urine involuntarily,⁴².—[530.] Delirious, but not wholly unconscious, starting frequently from a brief period of repose and screaming with pain or terror, and clutching violently with the hands. The flexor muscles of the extremities, the upper especially, were principally affected. The muscles of the spine occasionally contracted so as to jerk the head backwards with electric quickness. Pupils dilated to the utmost. Pulse 120, and diminished in force. Surface dry and hot, and covered with a strongly marked scarlatinoid redness (after one hour),⁴³.—Giddy and strange feeling in the head so that he could not see. Throat of a deep red hue, sore and could not swallow. Pupils widely dilated,⁴⁴.—Dryness of mouth and throat. Sour taste in mouth. Dryness and burning in the stomach. Repeated vomiting; partial delirium,⁴⁵.—Pupils widely dilated and insensible to light; gait staggering, the patients being unable to stand alone; there was great thirst, and the elder patient had incontinence of urine. They both talked and laughed wildly, but answered questions readily. The intellect was confused, both patients fancying they were still at home, and attempting to arrange furniture,⁴⁶.—Staggering on walking. Excessive nervousness. Giddiness. Loss of power over legs. Pulse rapid. Unconscious. Pulse weak and irregular. Skin dry. Face flushed. Violent delirium. Tongue dry and brown. Respiration laboring and quick, accompanied by flapping of cheeks. Twitching of some muscles of arms and legs. Catching at imaginary objects. Chest, râles about base. Unintelligible talk in sleep. Tympanitis over abdomen. Tenderness over abdomen. Soreness at pit of stomach. Urine high-colored, turbid, of an amber color; chlorides present; no albumen; specific gravity 1015. Pain over right side of chest. Cough and expectoration; sputum rust-colored and scanty. Absolute dulness of chest as far as spine of scapulae on right side behind, with tubular breathing and bronchophony. Over left lung, posteriorly, rough breathing, otherwise breath sounds healthy,⁴⁷.—Dryness of the throat. Confusion of vision. Pupils largely dilated (after four hours and a half). Slightly delirious, and staggered as if under the influence of alcohol (after five hours); he seemed to have hallucinations, for frequently he would put out his hands and attempt to grasp some imaginary object (after five hours and a half). Drowsy and stupid, but he recognized me and asked me in a sort of maudlin manner what was the minimum dose, meaning the minimum lethal dose; he could be easily aroused, and although his answers to questions were given in an indistinct tone they were quite rational, and some remarks that he made indicated that he appreciated the danger of his condition (after five hours and a half); the coma steadily increased, and the prospects seemed almost entirely hopeless; his head hung upon his shoulders in a perfectly limp state; there was complete unconsciousness, from which he could not be aroused; for about half a minute respiration ceased, and artificial respiration was resorted to, and could only be maintained at eight in a minute (after ten hours). Pulse 140, full and strong (after five hours and a half); 120, full, but not so forcible as before (after seven hours and a half); 120, less force (after ten hours). Respirations 20, and not in any respect abnormal (after five hours and a half); about 24 (after seven hours and a half); for about half a minute it ceased, and artificial respiration was maintained at 8 per minute (after ten hours); improved (after eleven hours),⁴⁸.—Delirium, to which was soon added all manner of absurd hallucinations. Pulse rapid and feeble. Skin flushed and dry. Tongue dry

and brown. Great thirst. Dryness of the throat,³¹—In a few minutes the child turned a deep red, like “scarlet fever,” over its face and the upper half of its body; the perspiration was checked, and the skin became hot and dry. This continued for five hours (after a teaspoonful). The same redness appeared, but only lasted for half an hour (after 6 drops),³².

BAPTISIA.

Authority. 13, C. Wesselhœft, M.D., Trans. Mass. Hom. Med. Soc., vol. iii, 1875, p. 457, took 3 drops of the 5th dil.

In five minutes to half an hour, aching pain of occiput, extending from ear to ear, and from nape of neck to vertex (first day),¹³.—Immediately after taking medicine, aching pressure over whole occiput, from ear to ear, and from vertex to nape of neck (fourth day),¹³.—[370.] For two days, severe sleepiness, dulness and drowsiness; weakness of memory; fall asleep easily while sitting or writing (second and third days). Great sleepiness all day while sitting still; irresistible desire to sleep in carriage; was so exhausted and sleepy after a light dinner, at 3 P.M., as to be unable to sit up any longer. Refreshed after an hour of imperfect sleep, but felt sleepy and tired all the evening (fourth day). Immediately after breakfast, great sleepiness, would like to lie down and sleep, though I slept well all night. Head dull and heavy; mental work costs great exertion; great disinclination to exert the mind in any manner. Excessively sleepy all day; gaping while conversing with people; fall asleep in the horse cars; and can scarcely keep awake while driving. Sleep after dinner refreshed me somewhat, but sleepiness returned in the evening with nausea (fifth day),¹³.

BARYTA ACETICA AND CARBONICA.

CORRECTION.—In Hahnemann's *Chronische Krankheiten*, last edition, vol. ii, these two salts were combined. Hahnemann indicated by a dash, the symptoms belonging to *Acetica*, and the editor separated these for the “*Encyclopedia*” (an unnecessary refinement, probably).

Recently Dr. Hering has communicated to the editor a discovery of errors in the original text of Hahnemann. The provers of *Acetica*, from Hahnemann, should be Adams, Stapf, Hartmann, Ruckert, Gross, and Hartlaub. Provers of *Carbonica*, Hahnemann, Rummel, Hartlaub, and Nenning.

The symptoms recorded by Neumann under *Baryta carb.* were observed, after the *muriate*.

Symptom 185 of *Acetica* should be revised so as to read at the end, “as in dysentery,” instead of “when at rest;” the error arose from a misprint in the original, which should be *Ruhr* instead of *Ruhe*. (See *Chronische Krankh.*, symptom 309.)

BARYTA CARBONICA.

Correction by Berridge in a letter to Dr. Allen.

Symptom 191, for “*his* side” read *this* side [*i. e.*, left side].

Authority. 26, Reincke, *Vjs. für Ger. Med.*, 1878, S. J., 180, 14, a

family were poisoned by 10 per cent. Carbonate of baryta, with a minute quantity of the sulphate of Baryta in meal.

The family consisted of two parents, daughter, and friend; also a dog and canary bird ate some. The bird died in five minutes; immediately afterwards the dog was taken with violent diarrhœa, and fifteen minutes after the four human beings became sick, the woman being seized with violent diarrhœa. There was paleness, accompanied by a peculiar sensation of tension in the skin. The three women drank some milk, but immediately vomited, after which they felt relieved. The father of the family experienced only rumbling in the bowels; he did not take milk till about 10 P.M.; this was followed by vomiting, with diarrhœa, and the next morning, at 4 o'clock, on attempting to go to the closet, he fell to the ground with symptoms of collapse. In the morning the vomiting and diarrhœa ceased, but gave place to paralysis, extending from below upward, so that at 10 o'clock he could only nod his head. At 2 o'clock the physician found the face red, speech difficult, loss of voluntary motion of the arms and feet, sensation intact; reflex irritation increased; sphincters normal; respiration rapid, with tracheal râles; sensorium free. Pulse and temperature normal. No pain, not even in the stomach. At 9 P.M., the patient died, though he had eaten no more tarts than the other members of the family. The post-mortem showed a most remarkably dark color of the gray substance of the brain. An apparently perfectly normal condition of the intestinal tract and of the stomach. Experiments upon birds with the food showed poisonous action, for the birds became unsteady upon their feet, made irregular movements with their wings, and fell down dead. A dog, after eating 20 grams of the tart, was taken after two hours and a half, with a violent but transient diarrhœa.²⁶

BARYTA MURIATICA.

Authority. 10, Prof. A. T. Thomson (*Journal of Science*, vol. iv), *Lancet*, 1836-7 (2), p. 423, a girl swallowed an ounce.

The instant she swallowed the solution she exclaimed that she was on fire; vomitings, convulsions, pain in the head, and complete deafness supervened; and death occurred within an hour.¹⁰

BELLADONNA.

Authorities. (242 to 254, from Dr. Dufresne's collection, Bib. Hom., vol. i, 1833, p. 319.) 242, Wade, *Lond. Med. Journ.*, 1827; 243, Ramve, *Act. Reg. Soc. Med. Havn.*, vol. ii, p. 346; 244, Jolly, *Nouv. Bib. Med.*, 1828, effects of 44 grains of the extract; 245, Dufresne's observations; 246, Darlac, *Journ. de Med. de Vandermond*, 1759; 247, Smith, *Journ. de Chim. Med.*, 1827, poisoning by the berries; 248, Munnicks, *Bib. Ther.*, 1823, poisoning of seven children; 249, Strecker, *Rust's Mag.*, vol. xxv, 1828, effects of a solution of the extract rubbed into the skin with oil, in a woman in labor; 250, Brandis, *Archiv*, vol. xxviii, p. 52; 251, Lemer cier; 252, Hecker's *Annals*; 253, Kentel, *Hufeland's Journ.*; 254, Remer, *ibid.*, vol. x; 255 (*Nouv. Biblioth. Med.*), *Lancet*, 1828-9 (1), p. 45, a man, aged forty-six, swallowed 44 grains of the powder; 256, *Lancet*, 1846 (2), p. 251, a man ate a tart made of the berries; 257, *ibid.*, effect on

a child; **258**, Pharm. Journ., vol. vi, 1847, p. 174, a man, aged thirty-four years, and a child, aged three years, ate a pie made of the berries; **259**, Dr. Lyman, Bost. Med. and Surg. Journ., vol. lv, 1856, p. 451, a woman, aged twenty-nine, wore a Bell. plaster for several days; **260**, Wm. Jenner, M.D., Med. Times and Gaz., 1856 (2), p. 513, a man applied a Bell. plaster to his back, which was covered with pustules; **261**, James Seaton, Med. Times and Gaz., 1859 (2), p. 551, poisoning of ten persons by the berries; **262**, Dr. Golding, Lancet, 1859 (2), p. 560, a boy, aged ten years, swallowed a mixture of extract with water; **263**, *ibid.*, a boy, aged ten years, took a teaspoonful of the undiluted tincture; **264**, Dr. H. Thompson, Lancet, 1859 (2), p. 561, poisoning of a child, aged seven years, by the extract; **265**, Geo. W. Quimby, Bost. Med. and Surg. Journ., vol. lvii, 1857, p. 389, took nearly a teaspoonful of the pure extract in its pasty state, in two-thirds of a tumbler of water; **266**, G. T. Evans, M.D., Brit. Med. Journ., 1861, p. 305, a girl, aged nine years, ate four berries; **267**, Dr. Frazer, Lancet, 1865 (2), p. 536, a girl, aged eighteen years, applied the extract to her breasts; **268**, H. Taylor, M.D., Brit. Med. Journ., 1869 (2), p. 555, a young man swallowed about a drachm of the extract dissolved in half a teacupful of warm water; **269**, Dr. Beddoe, Lancet, 1870 (2), p. 83, a woman, aged sixty-six, swallowed about a teaspoonful of Bell. liniment; **270**, Chas. W. Parsons, M.D., Bost. Med. and Surg. Journ., vol. lxxxvi, 1872, p. 384, a boy, aged four years, took within one hour and three-quarters, 6 grains of extract; **271**, Sharps's Essays, 1874, p. 770; **272**, Dr. S. Ringer, Lancet, 1876 (1), p. 347, a man, aged sixty-four years, drank about 2 drachms of liniment; **273**, *ibid.*, a girl, aged four years, drank over $\frac{1}{2}$ an ounce; **274**, Dr. A. Colton, U. S. Med. Invest., New Series, vol. iv, 1876, p. 314, poisoning of six children by the berries; **275**, *ibid.*, p. 315, a girl, aged two years, drank about one-fourth of a glass of water containing 4 drops of tincture; **276**, John Meredith, M.D., Brit. Med. Journ., 1876 (2), p. 678, a woman, aged fifty years, swallowed some liniment; **277**, H. L. Horton, M.D., Phila. Med. and Surg. Rep., vol. xxxiv, 1876, p. 464, an infant swallowed 45 grains of extract; **278**, H. F. Smith, M.D., Brit. Med. Journ., 1877 (1), p. 259, a man, aged seventy, with commencing orchitis, applied a liniment on lint to the scrotum; **279**, Dr. Thomas, Am. Journ. of Obs., 1877, p. 298, poisoning of a woman from the application of the extract to a rigid os; **280**, Alfred Cooper, Brit. Med. Journ., 1877 (1), p. 164, poisoning of a man from the application of the extract to the scrotum; **281**, J. D. Whitley, M.D., Chicago Med. Journ. and Exam., vol. xxxv, 1877, p. 271, a child, aged three years and a half, swallowed a teaspoonful of extract; **282**, J. N. Smith, M.D., Med. Rec., vol. xii, 1877, p. 397, for an attack of trifacial neuralgia, took $\frac{1}{4}$ grain of alcoholic extract, three daily; **283**, F. A. Burrall, M.D., Med. Rec., vol. xii, 1877, p. 431, Mrs. W., applied a Bell. plaster upon her right side; **284**, John Dewar, Lancet, 1878 (1), p. 18, a woman inserted a pessary containing 2 grains of Bell. into her vagina; **285**, E. L. Parks, Bost. Med. and Surg. Journ., vol. xeviii, 1878, p. 551, a man, aged twenty-eight years, took 1 drachm of extract at 2 p.m., and 1 $\frac{1}{4}$ drachms at 4 p.m.

Mind.—Delirium,^{248 249}.—Great delirium, with lucid intervals,²⁴⁹.—Wildly delirious, but quite fantastic, almost hysterical, laughing wildly and crying, and not at all conscious; pupils widely dilated; he evidently saw visions, as in delirium tremens, for he was constantly grasping and picking at imaginary objects; the odor of Belladonna was strong from his hands and feet; quite blind, and stared vacantly,²⁶⁴.—Violently agitated,

throwing his limbs about, groaning and moaning. Apparently unconscious, and did not speak, nor attempt to do so. These symptoms continued for an hour and a half without intermission. He then became comatose, and so continued till his death,²⁶⁸.—After three hours she was very delirious, talking fast, and throwing about her arms in an excited but feeble way; her pupils were widely dilated and insensible to light; her pulse was 126. Three quarters of an hour later she was very restless, tossing about the bed, picking at the bedclothes, and throwing about her arms in a meaningless way, but partially conscious of what was said to her. A “calabarized disc” was placed in one eye (the left); in about twenty minutes the left pupil had contracted to a pin’s point, the right pupil remaining widely dilated and insensible to light; the eyes continued thus till death, which occurred sixteen hours after taking the poison,²⁶⁹.—[2550.] He was quite delirious, the delirium being of a mild vagarious or fantastic character. He could neither hear nor speak plainly, and labored under hallucinations, but was otherwise unconscious. The pupils were widely dilated, and the eyes had a staring look. At first he complained of pain in his throat and of imperfect sight, objects appearing white to him. His pulse was feeble, and almost countless. Urine small in quantity for the first twenty-four hours,²⁶².—The symptoms were similar to those in case one, with the addition of a flushed face, more active delirium, the grasping at imaginary objects and picking of the clothes being also much more marked,²⁶³.—Immediately after the second draught he walked out, and noticed at once dimness of vision, dryness of mouth and throat, constriction of fauces, a feeling as if the tongue was enormously swollen, dulness of intellect, and weakness of knees, with want of muscular co-ordination. Having reached his room at 6 P.M., two hours after second dose, he became alarmed at his symptoms, called his landlord to his assistance. The patient was running up and down the room, drinking large draughts of water, upsetting pitchers, and in danger of falling. Medical aid was summoned at once. It was noticed at this time that the tongue was very red, and the secretion of urine increased. There were hallucinations like those of delirium tremens, disagreeable, vanishing instantly, and immediately after their departure the patient was aware of their unreality. The yellow corpse of a tall man, shrouded in white, tried to share the patient’s bed with him, and the unwelcome visitor was promptly ejected. A crimson serpent came from the foot of the bed, with the design of fastening upon the patient’s neck. Rising to his knees, he with his fist drove the serpent’s head deep into the bed, and instantly the apparition vanished. He asked his attendant (for he was practically blind) if the blanket had a red border to account for the hallucination. There were large sea-turtles about the room, such as he had seen in the Pacific. After an hour or two of sleep in the early morning the delusions became agreeable, and continued all day. While riding out in the afternoon with a medical friend, trees became personified to him as people in fantastic costume. In the morning there was severe pain in both renal regions, which he partially relieved by pressure with his fists, the elbows planted in the bed, and the body raised in that way quite off the mattress. Further details are given derived from medical attendants. The delirium was “most busy.” Picking things from the bedclothes, rising in bed to gather things from the pictures and walls, muttering to himself, he had little time to notice those about him. Great mental and physical prostration, sleeplessness, and pain in the left kidney followed the accident,²⁶⁵.—He was very restless and noisy. He was con-

tinually getting in and out of bed, and talking loudly and incoherently to imaginary persons, who, as he said, were trying to take away his bed-clothes. He complained of faintness, and of soreness and dryness of the throat, and pain across the forehead. He had vomited once and had been several times to the water-closet. He said his sight was all right, but evidently did not know what he was saying. Temperature 98.5° ; pulse 140, very weak. The skin was moist; the face flushed. The pupils were widely dilated and quite insensible to light,²⁶⁰.—All but two had delirium of a busy, restless, vivid character, but generally rather pleasing than otherwise. The patients appeared to think that they were pursuing their ordinary occupations; one boy appeared eager in flying a kite; another pulled tables and chairs about, thinking he was working in a coal pit; while the woman appeared remarkably busy with her ordinary household duties. All their movements were of a quick excited character, strikingly resembling delirium tremens. In none of the cases in which delirium was present were the symptoms alleviated until sleep was obtained; and after sleep, the patients felt comparatively well,²⁶¹.—General excitement. This was followed by giddiness, a feeling of intoxication, and a disposition to quarrel, laugh, and talk. The pulse became accelerated, and the mind filled with hallucinations, which increased to a state of absolute madness. This state lasted from one to twelve hours, and was then succeeded by one of insensibility, somewhat similar to that of a person in the last state of intoxication. In the fatal cases, this state lasted to the end,²⁵⁸.—She began to snatch at objects on the floor and elsewhere, which objects only existed in her own fancy. These visionary phenomena were, by her talk, found to be chiefly articles of work and various insects, beetles, flies, etc. (after five hours). As evening came on, she became nearly blind, restless to an inordinate degree, excessively and loudly talkative, incoherent and unmeaning in her words, which almost wholly, along with the movements of her hands, betokened a concern in her employment, or some immediate interest in her brothers and sisters who were not present. The tongue became somewhat dry, thick frothy mucus adhering to its sides. The skin was still more hot, and the pulse as high as 120. The delirium from this time rapidly increased; at one time expressive of great joy, at another great terror,²⁶⁶.—What was particularly observable in this case was a great deal of exhilaration or flow of spirits; a marked stimulation of the brain. The child did everything in a hurry, and saw the bright side, rather than the dark one, of what was observed. The Belladonna was taken about 4 p.m. The greatest amount of excitement or stimulation showed itself between 7 and 8 p.m., and it was fully 11 p.m. before she could be quieted so as to fall into a disturbed sleep,²⁷⁵.—Appeared dazed, and was ignorant of what had occurred, like one who had had an epileptic attack (second day),²⁷⁸.—Seems to see birds flying past and wishes to follow them,²⁴⁵.—[2560.] She moved her hands as though she wished to seize something,²¹⁷.—His speech is disconnected,²¹⁷.—Rage and convulsions, with grinding of the teeth,²⁴⁸.—Laughs in the most extraordinary manner,²⁴⁷.—Laughing and talking alternately,²⁴⁷.—Constant loquacious delirium, he talks without cessation of the pains at the neck of the bladder,²⁴¹.—Taciturnity,²¹⁷.—Remarkable loquacity,²⁴⁷.—Extreme anguish and agitation,²⁴⁹.—A few minutes after eating the tart he became drowsy, his lethargy soon increased, his countenance changed color, and the pupils of his eyes became dilated; had a strange coppery taste in mouth; staggered on going upstairs, and fell down insensible. He subsequently became delirious, and was very rough. His con-

tortions were dreadful. He attempted to strike his wife in his delirium, and when he recovered a little, said he was sorry, and asked her to kiss him.²⁵⁶—[2570.] Comatose condition, in which she died (one case).²⁶¹

Head.—Confusion of head,²⁶⁹.—Vertigo,²⁴² ²⁶¹.—Vertigo, with malaise,²⁴³.—On getting off the couch she was noticed to be giddy and confused (after five hours),²⁶⁶.—Instability of the body, without vertigo,²⁴⁶.—Heaviness of the head,²⁴².—Pain in head,²⁶¹.—Violent headache, particularly in the orbital region, accompanied by extreme redness of the eyes and face; the redness gradually extended over the whole body, and after a few minutes the whole skin was as red as in scarlet fever,²⁴⁴.

Eye.—Eyes sunken,²⁴².—[2580.] Eyes haggard and brilliant,²¹⁹.—Lids widely separated,²⁴⁸.—Pain in eyeballs, which felt as if starting from their sockets,²⁶¹.—**Pupil.** Pupil dilated,²⁵⁸ ²⁶⁰ ²⁷⁸.—Extreme dilatation of the pupils, with sensitiveness,²⁴⁸.—Pupils widely dilated while the delirium continued,²⁶¹.—Pupils greatly dilated, not contracting in ordinary light, and very moderately contracting in full sunlight (after two hours and a quarter),²⁶⁶.—Pupils insensible.²⁴⁷.—One drop of the tincture was added to ninety-nine drops of water, and the right eye was rubbed in the usual way, but no effect was perceived. Afterwards one drop of tincture was added to nine drops of water, and this was applied in the same manner, again no effect was noticed; then a drop was added to four drops of water, and applied; this experiment succeeded, a perceptible contraction of the pupil was noticed. Some months later the last-mentioned experiment was repeated at noon. Two drops of tincture were added to eight of water. Small portions of this dilution were rubbed over the eye at intervals during half an hour. At the end of this time the pupil was slightly contracted, it was less than that of the other eye. Afterwards the remainder was rubbed over the same eye, at intervals during another half hour; a slight dilatation of this pupil was noticed, it was larger than the other. This dilatation afterwards increased considerably, and had not disappeared on the following morning,²⁷¹.—**Vision.** Weakness of vision; it is difficult to distinguish letters, and he is obliged to hold the paper at a greater distance than ordinarily,²⁴⁶.—[2590.] Indistinctness of vision,²⁶¹.—Disturbance of vision; all objects seemed bordered with yellow,²⁴⁵.—Disturbance of vision wholly confined to the right pupil, which was widely dilated, not responding in the least to alternate light and shade, while the left was in a perfectly normal condition, and responded readily to light and shade. I continued the remedy for about one week, the right pupil remaining fully dilated during the whole of this time, and for two or three days subsequent to its discontinuance, while the left pupil failed to, at any period of the time, show the characteristic effect of the drug,²⁸².—He had no power to distinguish objects for more than three days,²⁴⁷.—**Amaurosis**,²⁴⁷.—Double vision and dilated pupil of the same side as that on which the plaster was. The next day the right pupil was still one-third larger than the left,²⁸³.

Nose.—Several prolonged fits of sneezing,²⁶⁶.

Face.—Flushing of the countenance,²⁵⁸ ²⁶⁰.—Redness and swelling of the face and lids,²⁴⁸.—Face deep red,²⁴⁹.—[2600.] Risus sardonicus,²¹⁶.—Convulsions of the jaws and of the muscles of the face and extremities,²⁴⁸.—Spasms of the jaws,²⁴⁸.—Spasmodic constriction of the muscles of the jaws,²⁵⁰.

Mouth.—Tongue covered with a white clammy fur, which he could pull off in strings,²⁶⁰.—Tongue dry and retracted (after nine hours and a half),²⁷⁸.—Tongue and throat extremely dry,²⁶⁰.—Tongue pale, dry,²⁴⁶.—The

tongue sticks to the throat on attempting to spit,²⁴⁶.—Unpleasant metallic taste in the mouth (after ten or fifteen minutes),²⁵⁸.—[2610.] No taste to food,²⁴⁶.—Moved mouth incessantly, evidently with the idea that he was talking, but the sounds he uttered were inarticulate and altogether unintelligible,²⁶⁰.—Difficulty in speaking, articulation indistinct,²⁴⁶.—Loss of speech,^{247 250}.

Throat.—Intense redness and heat in the throat and alimentary canal,²⁵¹.—Dryness of the throat and great difficulty in swallowing,²⁶¹.—Dryness and heat in the throat,²⁵¹.—Very great dryness of the throat and œsophagus,²⁴⁶.—Sensation of burning heat in the throat,²⁴³.—Dryness and heat in the throat and pain,²⁵².—[2620.] Heat of the throat and lips,²⁴⁸.—Very deep-red color of the mucous membrane of the fauces and palate,²⁴².—Tonsils swollen,²⁴².—Deglutition difficult, with heat in the throat,²⁵⁴.—Swallowing difficult,^{248 253}.—Paralysis of the throat, which impedes deglutition,²⁴⁶.—Unable to swallow (after one hour and a quarter),²⁶⁶.

Stomach.—Loss of appetite,²⁴⁸.—Loss of appetite, with loss of taste,²⁴⁶.—Loss of appetite, with a sensation of feebleness,²⁴².—[2630.] Thirsty (after one hour and a quarter),²⁶⁶.—Unquenchable thirst,²⁴⁸.—Nausea, with efforts to vomit,^{242 245}.—Vomiting,²⁴⁸.—Extreme distension of the stomach and bowels,²⁴².

Urinary Organs.—Extremely painful irritation of the urinary organs, and especially of the neck of the bladder; the patient constantly desired to urinate; though making every effort the urine passes only *guttatim*; urine very red and bloody,²⁴⁴.—She complained of pain in the region of the bladder, placing her hands on the pubes, and uttering words expressive of desire to pass urine. A catheter was passed amid violent physical opposition and a tremendous torrent of abuse; but only a few drops of urine flowed (after thirteen hours),²⁶⁶.—Excessive desire to urinate, but the urine is bloody and the emission pale,²⁵².—Excessive desire to mic-turate, though he could pass only a few drops of perfectly colorless urine,²⁶⁰.—Urine passed *guttatim*,²⁴⁶.

Respiratory Organs.—[2640.] Hoarseness (after ten or fifteen minutes),²⁵⁸.—The voice naturally hesitating and thick, became during the delirium so sharp and clear that the father would not have recognized it as his child's,²⁶⁰.—Cough resembling croup,²⁵⁰.—Deep respiration, as in croup,²⁵⁰.—Respiration irregular,²⁴⁸.

Pulse.—Pulse 110 (after two hours and a quarter); afterwards 120,²⁶⁶.—Pulse small, rapid,²⁴².—Pulse very feeble,²⁴⁸.—Pulse imperceptible (after four hours),²⁵⁰.

Extremities.—Limbs are violently agitated,²⁴².—[2650.] Weakness of the limbs,²⁴².—He could not stand till afternoon, and then could only walk with assistance (second day),²⁷⁸.

Generalities.—The whole body is in perpetual movement,²⁴⁷.—Convulsive catching of the extremities, face, and trunk, such as animals have when bitten by venomous serpents,²⁶⁰.—In a few minutes she vomited slightly, and in less than an hour after she commenced having spasms, which continued, alternated with periods of repose, until two hours and a half later, when she appeared to be sleeping soundly. Pulse 130; respirations 20 per minute; the entire surface of the body was covered with a very bright scarlatinal eruption, with occasional livid spots of variable size. Upon lifting the eyelids found the pupils dilated to such an extent that only a very small circle of the irides remained visible,²⁶¹.—The child was in his mother's arms, or partially so, as there did not appear to be a muscle in

his body but what was in spasmodic action, especially those of the extremities. The skin, in color and to a certain extent in thickness, had the appearance of scarlet flannel; the teeth were tightly clenched, with a little froth flying out between them at each irregular spasm of the muscles of expiration; eyelids widely separated and fixed; pupils dilated to their utmost extent, and immovable; totally insensible; pulse could not be counted on account of the incessant muscular twitching,²⁷⁷.—Immediately after last dose stupor, swelling around the throat and jaws, great flushing of the face, and dilated pupil. The flushing extended to and even above the roots of the hair on the frontal region. It was difficult to rouse the child; he stared when awakened, and was hard to control. He made wild resistance to anything done for him; if left quiet went off soon into a stupor. The heart was acting violently, beating hard, and more than 144 in the minute. Had illusions; saw visions on the floor; talked nonsense. Passage of an ounce of dark-colored urine,²⁷⁸.—In five minutes she was drowsy but conscious. The skin was very dry; the pupils widely dilated; face flushed. The skin flushed more readily than natural on irritation. She soon fell asleep, and woke three hours and a half after the poisoning, when she yawned and sneezed frequently. After this she fell into a doze, and woke in a second or two with a cry, and with slight convulsive movements. She tossed about a good deal. In four hours and a half she was very delirious, had unpleasant illusions, and screamed from fright. She followed with her eyes, in a rapid manner, imaginary objects. She tried to talk, but her words were inarticulate. There were slight convulsive twitchings. She did not know her mother, nor could her attention be attracted by objects held before her eyes. The skin was very dry. At about this time a deep, sharply-defined, uniform blush appeared on her face, neck, arms, trunk, and thighs. The delirium continued, but in about eleven hours the delusions appeared to be of a more pleasant character, and she occasionally laughed, and from this time on she continued to improve,²⁷⁹.—Three presented marked symptoms of poisoning. One showed the following effects: He was a boy four years of age, and he ate the berries about twenty minutes before 3 P.M. At 3 o'clock he was sleepy, and lay down. About ten minutes later he had marked twitching and jerking of the hands and, slightly, of the lower limbs. He would partially awaken, and then instantly fall asleep again. The nervous tremors continued all the time, and rather increased. The above symptoms continued for about an hour and twenty minutes from the time of the poisoning, when an emetic of Sulphate of zinc was administered. This produced a rather copious watery discharge from the stomach, with a few fragments of the *Atropa* berries. Then an entirely new set of symptoms supervened. The child was wakeful, and made passes as if picking up things, and would appear to pour them from hand to hand. He would run against things backward, sideways, and forward; then he would whirl on one foot, and run against things as before. In the midst of these movements he presented an episode, by throwing up his hands and asking a blessing, by then calling for bread, and appearing to think he had it, by taking up his apron and biting a piece off and chewing it. He immediately followed this by talking of his father and mother, who were at a distance. Again, he would throw things at persons around him, catching at anything that was within his reach. The above was the most marked case of poisoning among these children. The others presented far less demonstrations, their delirium being of a much more painful order. The effects had sensibly diminished by the next morning, and had entirely

disappeared on the second day,²⁷⁴.—Shortly afterward became insensible, with rigidity of the body and clenched teeth. Breathing with a loud snoring noise, but without puffing out the cheeks; the skin, lips, and mouth dry; pulse 104; respiration 22 (after two hours and twenty minutes). Contractions and twitchings of both arms, the fingers being clenched by tonic contraction of the muscles, and the elbows rigid (after three hours and twenty minutes). Half unconsciousness began to give way to fussy busy delirium. He constantly muttered, kept picking the bedclothes, and tried to get out of bed. He stared wildly about him, and was very suspicious. He continued delirious, but not violently, all that night and the next day (after ten hours and a half). Became so violent that it was necessary to lay him down in bed. He stared wildly about him, struggled to get out of bed, shouted at the top of his voice, "Police!" "Murder!" and suffered from various hallucinations, thinking he was in prison, or was about to be murdered. He was very suspicious, refusing to take food, thinking it was poison (after thirty-six hours),²⁷⁵.—[2660.] "In about five minutes," to use her own words, she "felt queer about the eyes, then stupid like" in her head; felt she was losing the power of standing on her legs. She became helpless and quite unconscious. In less than an hour, when I saw her, she could swallow only a few drops of water, and very soon she became unable to do this. She could not speak, only mumbled incessantly some inarticulate words, which were only audible at times. She was put into bed, and there she sat propped up by pillows, and had a vacant, drunken look; moved her hands about, sorting and catching at imaginary things. Widely-dilated pupils, and a diffused scarlet rash, which was out on the neck and upper part of the chest, and also on the hand and forearm. The rash was not of a long duration; it soon began to fade, and in four hours was hardly perceptible anywhere. For about twenty-two hours her life was a blank to her. On the morning of the second day, her pupils were widely dilated, and she saw persons and things double, and at times saw imaginary persons and objects about her; her hands felt moist, as did also her feet, and she could not stand. All through there was a good deal of distress about the throat; it was one of the first things experienced, and the discomfort lasted to a certain extent for many days. The patient eventually recovered; but for several days she felt she was not her ordinary self; could not remember how to do the simplest thing, had forgotten the way; had to ponder over the way an article of clothing should be fastened on, etc.,²⁷⁶.—In fifteen or twenty minutes after I had taken it, I felt a very disagreeable sensation in my chest and head, and slightly in my stomach. It seemed to me as if there were an accumulation of wind at the pit of the stomach, which should come up. The vital organs were weary, I wished to draw a long breath every moment, and soon grew worse. My face became flushed. The pupil of my eye was much dilated, covering nearly the entire iris. My head felt full and heavy. Giddiness followed, the room appeared to whirl and the floor to move. There was a sort of constriction in the chest and throat, slightly spasmodic, and a sense of suffocation. This condition rapidly increased in intensity till I felt I was assuredly dying. I could think of no other result. It appeared as if every breath I drew would be the last. I took leave of my family, as I found my voice failing and the sense of vision losing itself in darkness, when I became unconscious. I remained in this position from about 8 o'clock in the morning till after dark in the evening. When I came to myself, so as to know those around, the faces of persons look exceedingly large, broad,

and out of proportion. Any little speck or spot on the ceiling over head, or on the wall of the room, as large as a fly, for instance, the head of a nail appeared to my vision precisely like a spider with legs, and the legs constantly in motion.† This appearance continued for three or four days, but gradually corrected itself so far as *audition* to the real object seen went. Still for weeks and months, everything I looked upon, the ground, houses, trees, etc., appeared as if there were a sort of glimmer upon their surface, resembling the wavy motion of heated air arising from the roof or sides of a building. The figures of a carpet seemed to blend as I looked down upon them; indeed, nothing appeared natural to the vision. My stomach and bowels were torpid and inactive. For weeks and months I had no appetite, much of the time actually loathing the sight and smell of food. One singular sensation I experienced when consciousness was leaving me and immediately on its return, was this: whatever I touched with my hands felt exceedingly cold. The hands and fingers of my wife were as cold to my touch as icicles, and the longer I retained them in my hand, with the thought that they might soon become warm, *the more intensely cold did they seem*. This feeling was not imaginary, because about the first thing I remembered on coming to myself, when my wife spoke to me and took hold of my hand, was the sensation I have described; but it did not then feel as cold as when I was going into the state of unconsciousness. In four or five days I was able to sit up, and in ten or twelve to go out. But I was weak and trembling, easily excited, quick and hasty in my motions, with a sort of wild and glassy expression about the eye. I felt as if my nervous system was completely shattered. The feelings I have experienced in my brain, at the pit of the stomach, and through my limbs, to which I allude, are difficult to describe. At times when excited or a little weary, and sometimes when there is no apparent cause, even when I feel uncommonly well and bright, I experienced what I call a sort of *spasm in the brain*. The sensation comes quite suddenly. There is a sort of drawing and giving way, again, as if the nerves of the brain were in motion, when all upon which I look appears to move slightly in one direction, and then back to their former position. If the objects are at a distance, either forests, houses, or mountains, upon which I chance to look at the time, they seem to swing. At these moments I feel as if I should fall to the earth, though I experience no giddiness, but only a strange and alarming sensation at the pit of the stomach, corresponding to the feeling in the brain, and coming at the same moment, as if the two were connected, and the whole on the sympathetic nerves. This sensation was first experienced about two weeks after my prostration. I have since felt it many times, and generally when standing or walking, *but seldom when I either stand or sit with my back against something to sustain me*. In two months after I was prostrated, I felt those spasms at times so powerfully that it would seem I could not live if they should continue for the space of a minute. They generally pass off in the space of a few seconds, and do not return for some hours, perhaps not for a day or two.²⁶⁵—Expression vacant, laughing on the slightest provocation. Strong light produced no contraction of the pupils, which were widely dilated. Answered questions when aroused, but soon became incoherent; vessels of retina rather enlarged: pulse 114;

† All the symptoms which I have described above, followed in the case of my sister, who took but half the amount I did. She, however, did not become unconscious.

quick; extremities cold; mouth and tongue remarkably dry (first day). Delirious and very troublesome throughout the night; limbs feel numbed; objects appear a long way off, and as if double; sees letters dimly, but cannot read (second day),²⁷⁷.—The skin was of the color of a lobster; pulse 130; respirations rapid, sighing, and shallow; the pupils widely dilated, and the patient much alarmed. She looked as if in the eruptive stage of scarlet fever,²⁷⁹.—Dryness of throat, dilated pupils, and great pain in the passage. Vagina very dry, in great pain of a burning-stinging character. Her pulse was quick, the countenance was flushed, tongue dry and parched,²⁸⁴.—Severe pain in the top of the head, vomiting, dryness of the fauces, spasmodic action of the muscles of the throat and chest, and an indescribable sensation of sinking. Pulse quick and thready; irides very much dilated, though contractile; face and eyes suffused, extremities cold, tongue moist, skin dry. Urinated several times with severe scalding and irritation of the bladder,²⁵⁹.—Nauseous taste, like copperas, in her mouth, a tingling in the fingers, and stupor,²⁵⁷.—One hour after swallowing powder, he was attacked with violent headache, especially above the orbits; the eyes became of a red color, which quickly extended over the face, and at last over the body, so that within a few minutes the whole skin exhibited an intense uniform redness, such as is observed in scarlet fever; at the same time the patient felt violent pain and heat in the throat, and along the œsophagus, and, on examination, the fauces were found strongly inflamed. These symptoms were accompanied by a very painful irritation of the urinary passages, especially of the neck of the bladder, with constant but fruitless desire of making water,²⁵⁵.—Restless,²⁶⁰.—Desire to lie down,²⁴⁷.

Skin.—Scarlet redness over the whole body,²⁵².—[2670.] Scarlet redness over the whole body, with pain and heat in the throat, desire to urinate, and painful discharge of bloody urine,²⁴⁴.—Her body and limbs were covered all over with a beautiful scarlet rash, resembling the rash of scarlatina, but this disappeared in a few hours (after sixteen hours),²⁶⁶.—Transient redness over the whole body, especially on the chest and neck,²⁵¹.—Face, neck, and upper part of the chest reddened and congested (after nine hours and half),²⁷⁸.—In about one and a half hours the face of the child was covered with spots the size of a silver quarter, and larger. These spots were of a bright red color, and a little elevated and puffy, similar to nettlerash. These gradually coalesced, and in about two hours covered the face and front of the neck. Around the spots was a white border; also around the mouth,²⁷⁵.—Scrotum blistered,²⁷⁸.

Sleep.—Fast asleep (after three hours); sleeping quietly without stertor (after six hours and a half); after the application of cold to the scrotum and spine, tickling and pinching the feet and legs, the patient became partially aroused at 3.30 A.M. (after sleeping nine hours and a half); he then slept quietly till morning, when he woke of his own accord,²⁷⁸.—Wakeful,²⁶¹.

Fever.—Skin cold (after four hours),²⁵⁰.—The lower limbs were inclined to be very cold, and it was with considerable difficulty that they were kept partially warm,²⁷⁵.—[2680.] Skin hot (after two hours and a quarter),²⁶⁸.—Profuse perspiration,^{248 249}.

BENZINUM NITRICUM.

Authorities. **12**, Dr. Mackenzie, *Med. Times and Gaz.*, 1862, p. 239, a boy sucked some through a siphon; **13**, E. Nicholson, *Lancet*, 1862 (1), p. 135, a student took a soap perfumed with nitrobenzol into a bath; **14**, Alfred S. Taylor, *Guy's Hosp. Rep.*, vol. x, 1864, Mr. Fotherby communicated to me a case, a woman, æt. thirty years, swallowed not more than a drop, and spilled a tablespoonful, and did not immediately wipe it up; **15**, Ein Fall von Nitrobenzolvergiftung, *Inaug. Diss.*, Dr. Hermann Pagenstecker, Würzburg, 1867, case of poisoning; **16**, Dr. Swederus, *Hygiea*, 35, 1873, S. J., 170, p. 232; **17**, Ewald, *Centralblatt für die Med. Wissenschaften*, 1873, *Lond. Med. Rec.*, vol. iii, 1875, p. 75, a young woman, æt. twenty-two years, took about a drachm of commercial bitter almond oil; another, æt. eighteen years, took about $2\frac{1}{2}$ drachms; **18**, Ewald, general symptoms; **19**, Dr. Bruglocher, *Ærz. Intell. Blatt*, Jan. 5, 1875 (*Lond. Med. Rec.*, vol. iii, p. 74), a soapboiler, æt. forty years, took five or six drachms, with about twenty times its bulk of spirit; he took part at 2 A.M., the rest at 7 P.M.; **20**, Dr. Stephenson, *New Remedies*, 1876, p. 268, a man, æt. thirty years, for pain in the chest and cough, took of the following prescription, Benzol, rect. ʒij., Ol. Mentu. Pip. ʒss., Ol. Olive, ʒx, three doses of thirty drops (first and second days), one dose at 9 A.M. (third day); **21**, Bruglocher (*Bayr. Arztl. Intell. Blatt*, 1875), S. J., 168, 128, poisoning by a small quantity; **22**, From the Swedish, S. J., 170, 232, a man took some by mistake for castor oil.

Mind.—Stupor,¹⁸.—First felt only a little sleepy, finally the stupor increased, and it was impossible to rouse him, and he died twelve hours after,¹².—Both recovered after about five and twelve hours' insensibility, and a further period of partial coma,¹⁷.—Soon became unconscious, tossed about, with inarticulate, confused speech,¹⁶.—Complete loss of consciousness,¹⁵.—Extreme coma,¹⁸.

Head.—[110.] Headache,¹⁸.—Slight headaches,¹⁷.

Eye.—Rolling of eyeballs,¹⁸.—Constant slow movement of the eyeballs, from left to right, under the closed lids,¹⁵.—Eyes partly closed,¹⁶.—Pupils dilated,^{16 18}.—Pupils contracted,¹⁵.

Face.—Edema of face,¹⁸.—Face intensely pale, bluish,¹⁵.—Face bluish gray, covered with cold sweat,¹⁶.—[120.] Jaws spasmodically closed,¹⁶.

Mouth.—Tenacious saliva flowed from the mouth,¹⁶.

Stomach.—Vomiting,¹⁸.

Stool.—Involuntary evacuations,^{16 18}.

Urinary Organs.—Diuresis towards the latter part of the case was greatly increased,¹⁵.—Urine drawn by the catheter brownish red,¹⁵.—The first urine passed in case No. I was about 9 ounces, brownish red, slightly turbid, free from albumen, sp. gr. 1020, and smelling strongly of bitter almonds. It held a large quantity of cupric sulphate and potash in solution, but did not reduce the copper [? glycogen, glycooll, or inosite]. The urine in the second case was twice drawn off by catheter (six and eight hours afterwards), and a third sample passed spontaneously was also examined. The first samples equalled about half a pint together, sp. gr. 1017. The next was similar. The quantity is not stated. It partially reduced, but did not decolorize, Trommer's solution, and failed to show appreciable amount of sugar by the polarizing apparatus,¹⁷.

Respiratory Organs.—Accelerated respiration,¹⁶.—Respiration

18. and 22.¹⁷.—Respiration irregular, scarcely 10 to the minute.¹⁵.—[130.] Respiration irregular, snoring.¹⁶.—On every deep inspiration the wings of the nose dilated, the lower lip was somewhat drawn inward, and the epigastrium was much raised; with the respiration there was vesicular pharyngeal stertor.¹⁵.

Pulse.—Rapidly of pulse.¹⁶.—Pulse 124 and 108.¹⁷.—Pulse tense, irregular, intermittent, at times slow, sometimes rapid, about 96.¹⁵.—Pulse weak, regular.¹⁶.—The pulse became very slow and weak.¹⁶.

Generalities.—The blood taken by cupping was brownish in color, but gave no special spectrum bands.¹⁷.—Powerful odor of bitter almond.¹⁶.—There was an intense smell of the poison in the breath, vomit, etc., for three days. Even the urine smelled of it.¹⁷.—[140.] Violent trembling followed by transient spasms, with drawing of the head backward, and to the left side.¹⁶.—Convulsions.¹⁸.—The burning taste in the mouth was immediately followed by a sensation of numbness and tingling in the tongue and lips, and a strange feeling for the next hour. In an hour and three-quarters after the occurrence her aspect was quite typical of prussic acid poisoning; the eyes were bright and glassy; the features pale and ghastly; the lips and nails purple, as if stained by blackberries; the skin was clammy, and the pulse feeble. She was able to swallow a mustard emetic, after which she became rapidly worse; lost her consciousness; the teeth became set, the hands clenched and blue, the muscles rigid and convulsed. She vomited freely a pale fluid matter, which had the peculiar odor of nitrobenzole. The breathing became much reduced, and the pulse could scarcely be felt. In about eleven hours there was reaction, consciousness returned, and she was able to swallow. At the end of seventeen hours she was much better; but she then complained of distorted vision, with flashes of light and strange colors before her eyes. For some weeks she continued weak. There is no doubt these severe symptoms were chiefly due to the breathing of the vapor in a concentrated form. A fellow-servant in the room at the time the nitrobenzole was spilled also felt sick from the inhalation of the vapor.¹⁴.—Loquacity was followed by drowsiness, which was soon merged into complete insensibility. He was found quite unconscious at 7.30 p.m. At 8.30, when brought to the infirmary, all his limbs were paralyzed, as in deep chloroform narcosis; the jaw was clenched tightly, and was opened with great difficulty. The skin was cyanotic; the lips were of a violet-blue. He foamed at the mouth. His breathing was stertorous and superficial. The pulse was scarcely to be felt. The heart's impulse and sounds were extremely weak. The surface was cold. The pupils were moderately dilated, insensible to light. The urine and feces were passed involuntarily. He smelt strongly of bitter almonds.¹⁹.—On the afternoon of the second day he was observed to look pale and weak, but he was not conscious of feeling ill until after taking the dose at 9 a.m., on the third day. All the morning he suffered from headache. He left the office shortly after 2 p.m., but had not walked more than forty yards when he fell. He was just sensible enough to state where his office was situated, but speedily became quite unconscious. When seen at 3.5 p.m. he appeared to be dead. The surface was bluish purple and cold. No pulse could be felt at the wrist. The lower jaw was rigidly closed, but the lower limbs were flaccid and dropped powerless when raised. The heart could, however, be heard beating faintly and irregularly. No breathing could be perceived until twenty minutes later.²⁰.—He fell to the ground unconscious, the extremities paralyzed, as in deep chloroform sleep, eyes closed by

spasms, skin cyanotic, lips blue, with frothing from the mouth. Respiration very superficial, temperature depressed, pulse scarcely perceptible, the heart's action extremely weak. Pupils insensible. Involuntary evacuation of fæces and urine,²¹.—Soon after he staggered to and fro in an almost unconscious condition, with inarticulate and confused speech. Tenacious saliva flowed from the corners of the mouth, the face assumed a bluish-gray color, and was covered with cold sweat. The wings of the nose, eyelids, and lips were intensely blue. After a few minutes he fell down in an unconscious state, the eyes staring, the lids half closed, the jaws spasmodically closed. Hands almost cold. The whole body was covered with copious cold sweat. Pulse weak. Respiration became irregular, stertorous, often ceasing altogether, then beginning again with violent deep inspiration whenever the nostrils were irritated by Cauticum ammonium. After this violent trembling began, followed by transient spasms, with drawing of the head backward and to the left. Excretions involuntary. The pulse became slow, weak, and a soporose condition set in. The whole body was covered with cold clammy sweat,²².—Fainted from the effects of the vapors, and felt ill for some time afterward,¹³.—Hyperæmia,¹⁸.

Skin.—Punctiform ecchymoses,¹⁸.—[150.] Both patients were cyanotic, like a case of severe emphysema,¹⁷.—Intensely blue color of the wings of the nose, eyelids, hands, and lips,¹⁶.—Fingers and toes cyanotic,¹³.—Two large ecchymosed spots, of a livid, bluish-black color, were found beneath the scalp, and on the gluteal muscles; two cuppings of the lower portion of the thorax discharged black thin blood,¹⁵.

Fever.—Temperature very much depressed,¹⁵.—Chill came on the second day in the afternoon, with chattering of the teeth, after which the patient became worse, the pulse was more rapid, respiration irregular, and slower and slower till death,¹⁵.—Rise of temperature,¹⁸.—Temperature 100.8° and 97.6°,¹⁷.—Sweatings,¹⁸.—Whole body covered with cold clammy sweat,¹⁶.—[160.] Whole body covered with profuse cold sweat,¹⁶.

BENZOIN.

Lindera Benzoin, Meisner (*Laurus Benzoin*, L.; *Benzoin odoriferum*, Nees).

Natural order, Lauracæ.

Common names, Spice-bush, Fever-bush.

Preparation, Tincture of twigs.

Authority. J. S. Wright, U. S. Med. Invest., New Ser., vol. iv, 1876, p. 575, took a tablespoonful of tincture made from small limbs at 8 A.M., 2 P.M., and 6 P.M. (first day); 2 tablespoonfuls (second day).

Hair oily (second day, and afterward).—Wake from sleep with a sick feeling in stomach and bowels; tired feeling; turn often in bed (first night).—Empty feeling in stomach and lower part of bowels (first day).—Urine more frequent, and small quantity, of dark color; had to be up in the night to urinate twice. Bed swims, with sinking sensation, which made lying down on bed unpleasant. Had unpleasant, fearful feeling (third day).—Stool soft, with pain before, in lower bowels (third day).—Finger-joints swelled and lame (third day).—Sense of touch fine, quick, and pleasant (second day).—Hips feel crushed (first day).—Pains in knees (third day).—[10.] Skin cold; feet and legs cold up to knees; remained

cold in bed (first day).—Feverish during the second night.—Skin moist (second day).

BISMUTHUM SUBNITRICUM.

Authority. 9, Dr. Kerner (Heidelberg Klin. Annal.), Lancet, 1829-30 (2), p. 349. A middle-aged man swallowed a large quantity.

Hiccough, violent vomiting of brownish matter and profuse diarrhœa, the pulse was small and intermittent, the face pale and the whole body cold; the voluntary muscles, especially those of the lower extremities, were spasmodically contracted; the throat and pharynx were inflamed, he could not swallow, and complained of much pain in the throat, a nauseous metallic taste, and intolerable thirst (in eleven hours),⁹.

BOVISTA.

Authority. 6, Dr. Roth (Journ. de la Soc. Gall., Mat. Med. Pure, vol. ii, p. 133), M. Pr. Correspondance pratiques, 1828, p. 65.

Dull headache, like a pressure, below the left eye, toward the temporal region,⁶.—[660.] In the afternoon, a kind of intestinal colic, with urging to stool,⁶.—Transient lancinations extending through the perinæum towards the anus and genital parts,⁶.—More copious discharge of urine, in the afternoon,⁶.—Fulness and anxiety in the præcordial region (in an hour),⁶.—Spasmodic pullings in the tendons of the left carpal joint,⁶.—Numb feeling in the left carpal joint,⁶.—Transient lancinations in the left thigh and leg, as also in the chest,⁶.—Cramps in the left leg,⁶.—General anxiety, general fatigue, eructations, nausea, abdominal inflation, emission of a great deal of flatulence, yawning and stretching, and invincible drowsiness,⁶.—Restlessness, anxiety, unpleasant heat and heaviness in the abdomen, and from time to time sensation of coldness throughout the body,⁶.

BRACHYGLOTTIS.

Brachyglottis repens, Forst.

Natural order, Compositæ.

Common names, Puka Puka (New Zealand).

Preparation, Tincture of green leaves and flowers.

Authority. L. C. Fischer, M.D., N. A. J. of Hom., vol. ix, 1878, p. 41, L. C. F., aged forty-six years, took 10 drops in water at 10 A.M. (first day); 20 drops in water at 11 A.M. (second day); 40 drops in water at 10 A.M. (third day); 80 drops at 11 A.M. (fifth day); 80 drops at 10 A.M. (sixth day); 20 drops in twenty spoonfuls of water, at 12 M. took four spoonfuls (eighth day); 4 drops in four spoonfuls, at 10 A.M. (eleventh day); 1 drop of tincture in solution, at 10 and 11 A.M. (thirteenth day); 20 drops in eight spoonfuls of water, one spoonful of solution at 12 M.; 5 drops in solution, at 7 P.M. (fourteenth day); 20 drops in solution at 11 A.M., 10 drops 12 o'clock at night (sixteenth day).

Mind.—Irritable mood (eleventh day).

Head.—Confusion in the head (after two hours, fifth, thirteenth, and fourteenth days).—Confusion in the head and pain in the forehead (soon, thirteenth day).—Giddiness and flushed face (fifteenth day).—Headache

(after half an hour, sixth and eleventh days).—Headache, pressive and throbbing, forehead (after one hour, thirteenth day).—The headache and faceache become very intense, and prevents sleep during the night (thirteenth day).—Increasing desire to bend the head (fourteenth day).—Pain in the forehead (fifth and sixth days).—[10.] Pressure in the forehead (after one hour, first day).—Pressive pain in left side of forehead (after two hours, fifth day).—Headache concentrated about left eye, soon (thirteenth day).—Frontal headache, evening (fourteenth day).—Throbbing in left temple (eighth day).—Transitory sudden throbs, left side of head (after one hour, second day).

Ear.—Pain in the ears (fourteenth day).—Pain in left ear, evening (fourteenth day).—Tingling in the ears (eighth day).—Pricking in the ears (soon, fifth and fourteenth days).—[20.] Itching and pricking in the ears (fifteenth day).—Since commencing the proving, tingling in the ears, with secretions, with which I have never been troubled (twelfth day).

Nose.—Soreness in nostrils exteriorly (after one hour, first day).—Irritation in the nostrils, and repeated sneezing (after two hours, second day).—Irritation in the left nostril, and feeling as if the air is too sharp (soon, third day).—Itching in the nose (after two hours, fifth day).—Itching and burning in the nostrils (fifteenth day).

Face.—Slight twitches in left side of face, evening (fourteenth day).—Faceache, left side, as if the submaxillary glands were affected, extending to the upper part of the face (after one hour, second day).—Soreness, zygomatic process, right side of face (soon, third day).—[30.] Soreness in the zygomatic process, left side (after one hour, thirteenth day).—Sudden lancinating pain in the right side of face (fourteenth day).—Since about a week a soreness has been felt on the corners of the mouth, which now relieves itself by swelling of the lips (fourteenth day).—Severe pain in left submaxillary region (eighth day).—Left lower jaw painful (after one hour, thirteenth day).—Pain in left submaxillary gland (fourteenth day).—Immediately after dose, pain in the left lower jaw and face (fifteenth day).

Mouth.—Toothache, right side, extending to the ears (after two hours, third day).—Toothache (after two hours, fifth day).—Soreness of the tongue (after two hours, fifth day).—[40.] Pricking and numbness in the tongue, evening (fourteenth day).—Heat in the mouth (after one hour, second day, and after two hours, fifth day).

Throat.—Slight soreness in the throat (after one hour, first day).—Scraping sensation in the throat (after three hours, third day).—Rawness in the throat (after one hour, third day, and after two hours, fifth day).—Soreness and rawness in the throat, evening (fifth day).—Dryness and rawness in the throat (eighth day).—Rawness and soreness in the throat (fourteenth day).—Rawness in the throat (fifteenth day).

Stomach.—Loss of appetite (after two hours, fifth day).—[50.] Eructations (third, fifth, and thirteenth days).—Frequent eructations of the taste of the medicine (soon, third day).—Nausea (after two hours, fifth, thirteenth, and fourteenth days).—Nausea and eructation of the taste of the ingesta, evening (second day).—Nausea and eructations (after three hours, third day).—Nauseating sensation in the stomach, evening (fourteenth day).—Pain, soreness in the stomach (soon).—Fluttering in the stomach (soon, third day).—Evening, after tea, soreness; throbbing in the stomach and bowels, right side (fourteenth day).

Abdomen.—Acute throbbing in right hypochondriac region (sixth day).—[60.] Colic and desire for stool (fourteenth day).—Fluttering sen-

sation in the abdomen (after one hour, thirteenth day).—Soreness in the groins, as if in the spermatic cords, and a thrilling sensation through the penis and testes (sixth day).—Pain in the left groin (after two hours, fifth day).—Almost constant pain in the groins and weariness in the lower limbs (after three hours, third day).—Acute pain in the groin (after two hours, fifth day).—Isolated throbbing in left groin (after one hour, first day).—Throbbing in the left groin, morning (third day).—Pain of the same sudden throbbing character in the left groin (fourteenth day).

Anus.—Prostration about the anus (sixth day).

Stool.—[70.] Evacuation of dry fæces, with sore, constrictive pain in the anus, evening (third day); in the evening, a small soft evacuation of the bowels, attended with pain and constriction in the anus (fifth day); ineffective urging for stool (sixth day); the action of the bowels has become more and more constipated and painful; fæces like balls, and knotty (thirteenth day); diarrhoeic stools, in the evening (sixteenth day); tendency to diarrhoea (seventeenth day).

Urinary Organs.—Soreness in the region of the kidneys (after three hours, third day).—Gnawing pain in the region of the kidneys (soon, seventh day).—Pressure and soreness in the neck of the bladder (after one hour, second day).—By passing urine, pain in the bladder and soreness in the urethra; feeling as if the urine could not be retained (after one hour, third day).—Irritation in bladder and urination (after three hours, third day).—Since the evacuation in the evening, pressure and acute pain in the bladder and urethra, with stinging in the penis (fifth day).—Irritation in the bladder continues, evening (fourteenth day).—Stinging pain in the urethra (after two hours, fifth day).—Desire to urinate (fifteenth day).—[80.] Urine abundant; specific gravity 0.8; full of mucous filaments under the microscope, consisting of mucous corpuscles and epithelium (after one hour, third day); inclination and urgent desire to pass urine; 12½ ounces; specific gravity .04; reaction acid (after two hours, third day); passed again a large quantity of pale-colored urine (after four hours, third day); during the evening and night a reaction seemed to have set in; passed only a small quantity of urine in the next twenty-four hours; 5 ounces; specific gravity 20; full of mucus, dark-colored and reactive (third day); urgency in passing urine; pain in the neck of bladder; a large quantity of pale-colored urine voided; specific gravity .08; boiling and nitric acid test prove albumen (soon, fifth day); passed a large quantity of dark-colored urine, containing long threads, which when examined microscopically, proved less mucus, but more transparent waxy casts (after two hours fifth day). Pressure in the neck of the bladder by voiding urine in the evening, as formerly; the quantity is much less and dark in color; specific gravity 24; long threads again floating in it (fifth day). The urine voided was examined with the microscope, and consists of a mass of epithelial cells, adhering to each others (phosphates; oxalate of lime). The quantity of urine voided in the twenty-four hours was 48 ounces; specific gravity 24 (fifth day). Passed soon a large quantity of urine, with constant desire and feeling as if the bladder was not emptied (sixth day). Desire for micturition during the day; urine dark; specific gravity 23; acid reaction (eighth day). Urinary secretion painful in the bladder and urethra, and distinct in the penis (thirteenth day). Passed 48 ounces of urine in twenty-four hours, dark color; specific gravity 24; mucous cells and triple phosphates (fourteenth day). Passed about 56 ounces of urine in twenty-four hours; specific gravity 20; full of white mucous sediment,

more than any previously passed, containing epithelium, triple phosphates, and mucous casts from the kidneys (sixteenth day). Urine is much clearer; specific gravity 22; acid reaction (seventeenth day).

Sexual Organs.—Throbbing in the penis and desire to pass urine; pressure in the bladder (fourteenth day).

Respiratory Organs.—Oppressive breathing; sighing gives relief, evening (fourteenth day).—Oppression of breathing, as if the pectoral muscles were contracting, and a stretching would give relief; which sensation seems to be also in the dorsal muscles and right shoulderblade (fourteenth day).

Chest.—Pressure in the chest (œsophagu-?), (after three hours, third day).—Shooting in pectoral muscles in the region of the heart (fifteenth day).—Throbbing in the sternum, and pain in the pectoral muscles (soon, thirteenth day).—Pain in right side (after one hour, first day).—Painful soreness in the sterno-mastoid process (after one hour, thirteenth day).—Pain in left side of the chest, region of the heart, evening (fourteenth day).

Neck and Back.—Stiffness in the neck (soon, thirteenth day).—[90.] Pain in the neck by moving the head from one side to the other; soreness in the region of the attachments of sterno-mastoid muscles (after two hours, fifth day).—Pain in neck continuing, evening (fifth day).—Pain in the neck, prominently affecting the upper part of the trapeze muscle and extending to the shoulders (fifteenth day).—Isolated throbbing pain in right side, back (after one hour, first day).—Painful throbbings about the shoulder and collar-bone (after three hours, third day).—Pain in back (after one hour, first day).—Severe pain across the loins (after two hours, second day).—Weariness in the back from the coccyx upwards, and dull pain in the region of the kidneys (after two hours, fifth day).—Pain in the back and weakness in the extremities (after two hours, fifth day).—Dull pain in the back and region of the kidneys increasing, evening (fifth day).—[100.] The soreness in the lower part of the spine, from which I was free, is returning with great violence and intensity; it is almost traceable to the sciatic nerve (eighth day).—Uncasiness in the back, and prostration all day (ninth day).—After riding, the pain in the lumbar region returned with great intensity, extending also to the pectoral muscles and arms (tenth day).—Soreness in the first dorsal vertebra to the touch (first time since proving), (fourteenth day).—Feeling as if the whole back would contract backward, and the muscles of the neck were affected (fourteenth day).—Sudden pain about the fourth and fifth dorsal vertebra, extending to the right side of chest and shoulders, evening (fourteenth day).—Pain and weariness in the back (eleventh day).—Pain in the back returns with great intensity (soon, thirteenth day).—Great prostration and pain in the lumbar region by walking (after one hour, thirteenth day).—Aching in the lumbar region (fourteenth day).—[110.] Lumbar pains very severe (fifteenth day).

Extremities.—Weariness in the limbs, morning (third day).—Prostration and weakness in the extremities is increasing, afternoon (fifth day).—Weakness in the limbs (after two hours, fifth day).—During the afternoon all symptoms ceased, except weakness in the extremities (eighth day).—Great inclination to stretch the limbs, and especially the arms, to give relief to the weariness between the shoulderblades and trapeze muscles (fourteenth day).

Superior Extremities.—Cracking in the joints of left arm (eighth day).—Feebleness in the arms (after one hour, first day).—Weariness in

the arms (after three hours, third day).—Prostration and weakness in the right arm, by writing (eighth day).—[120.] Weakness and prostration in the arms and wrists (after one hour, thirteenth day).—Great fatigue in the arms, evening (fourteenth day).—Prostration of the arms (fifteenth day).—Isolated sore throbs in the right arm, and under the right arm-pit (after one hour, first day).—Isolated throbbing or shooting in the arms (eighth day).—Throbbing as formerly, in the arms (thirteenth day).—Cracking in the left shoulder; this has never been experienced before (fourteenth day).—Soreness in the shoulders and neck (soon, fifth day).—Pain under the right axilla, extending to the pectoral muscles (fourteenth day).—Pain under right axilla (fifteenth day).—[130.] Painful soreness under the arms (fourteenth day).—Pain of great intensity in the deltoid of the left arm, evening (fourteenth day).—Weary pain, upper arms (after one hour, second day).—Weakness and soreness in the biceps (after two hours, fifth day).—Sensation of pain running along left upper arm, becoming stationary (fourteenth day).—Pain in left elbow, morning (third day).—Soreness in the right wrist, extending upwards to the elbow, as if traceable in the flexor carpi ulnaris muscle (after two hours, fifth day).—Soreness, left wrist (after one hour, second day).—Soreness and pain in left wrist (fourteenth day).—Throbbing and shooting pain in the wrist (after two hours, fifth day).—[140.] Soreness in the fingers and thumb; weakness in the hands in writing (after three hours, third day).

Inferior Extremities.—Cracking in the joints of lower extremities, by walking (fourteenth day).—Weakness in the lower extremities, by walking (after two hours, fifth day).—This morning, felt great prostration in the legs, and soreness in the lower part of the spine; the weakness and pain are more perceptible in the left than in the right thigh (seventh day).—Weakness in the lower extremities increasing, extending from the hip to the knees (after one hour, thirteenth day).—Pain in the thighs by walking (after one hour, first day).—Transitory, short, sudden pains in thighs (after one hour, second day).—Rheumatic moving aching in the left knee, very intense (sixteenth day).—Sore throbbing pain in right knee (after one hour, first day).—Immediately after second dose sharp throbbings or shootings in the knees, and contractions, cramplike, in the muscles of the thighs (soon, thirteenth day).—[150.] Pain in the knees; sore throbbings (fourteenth day).—Great weakness in the legs and prostration, evening (third day).—Pain in the lower part of the legs (fourteenth day).—Throbbing sore pain in legs (after two hours, fifth day).—Soreness on the soles of the feet (fifteenth day).

Generalities.—Loss of flesh since commencement of proving (fifteenth day).—Appearance of general illness observed by my friends (fifteenth day).—Increasing weakness and pain in the back (sixth day).—Lassitude and weakness (thirteenth day).—Great lassitude and prostration (seventeenth day).—[160.] Soreness to touch (fourteenth day).—While at first the pains had a nervous character, they are now decidedly muscular and lasting longer (fifteenth day).—The action of the drug appears to be more on the spine and nerves than on the muscles. The pains are of short transitory character, and not of a continuous muscular pain. Except in the spine, where the pain is not constant, it appears as if the action could be traced along the anterior branches of the saphenic nerves, and perhaps along the saphenic vein; the pain in the groin is unquestionably the result of the crural nerve.—It was some time before the irritation in the bladder and urethra ceased, also the prostration and weakness lasted several days,

and the isolated troubles through the arms, legs, and thigh continued several weeks.

Skin.—Painful itching burning by walking, under the big toes, and itching in the sole of the right foot (fourteenth day).—Itching of the skin (fourteenth and fifteenth days).—Itching in the face (after two hours, second day).

Sleep.—Very sleepy during the day, and constant yawning all day (eleventh day).—Great inclination to sleep (twelfth day).—Great inclination to stretch (fourteenth day).—[170.] Heaviness and sleepiness (seventeenth day).—After waking could not fall asleep again; confused dreams (fifteenth day).—A very restless and sleepless night was passed (tenth day).—Restless sleep during the night (fourteenth night).—Talking in sleep (fifteenth night).—Night full of dreams (fifteenth day).

Fever.—Cold and chilly (after one hour, first day).—Chilly; pulse 50 (after one hour, first day).—Shivering and chilliness immediately after taking the dose (soon, third day).—A cold sensation and tightness about the scalp (after two hours, fifth day).—[180.] Rigors and chilliness (eighth day).—Rigor and chills all over the frame (fourteenth day).—Chilliness and heat in the face (fourteenth day).—Hands and feet cold (fourteenth day).

BRASSICA NAPUS.

Brassica napus, L. (now considered a variety of *B. campestris*, L.).

Natural order, Cruciferae.

Common names, Rape seed, Cole seed.

Authority. John Popham, M.B., *Lancet*, 1849 (2), p. 635, a large number of Irish during the famine ate freely of wild corn kale or *Brassica napus*.

They all exhibited indications of deteriorated health, the hue of the skin being uniformly sallow and muddy-looking, totally different from the brown discoloration caused by exposure to the sun; the surface was always covered with that colorless downy hair, so characteristic of what the country people here call "impoverished blood." An oedematous state prevailed generally of the whole body, but always of the face and lower extremities, the former sometimes being swollen to an enormous extent, the distended state of the eyelids and upper lip especially producing remarkable deformity. The abdomen was tympanitic; the bowels torpid; the mucous membrane of the mouth and pharynx was inflamed, and in some parts ulcerated, and the gums spongy; the appetite was usually greater than natural, in some cases voracious; the urinary secretion was deficient and irritating, and that of the skin suspended; very distressing frontal headache and tension was also complained of; but the most curious symptom, next to the oedematous appearance of the patient, was the state of the hands and feet, which were dry and shrunken, with blotches of a deep red, resembling burns, on the backs of the hands and dorsum of the feet, the fingers and toes being frequently cold and livid. Similar blotches existed on the nose and forehead, and these varied in their consequence from simple discoloration to ulceration of a most troublesome description, terminating in loss of the cuticle, and dropping off of the nails, with a marked disposition in the aggravated cases to gangrene.

BROMIUM.

Authority. 27, Heimerdinger, die Wirkung des Broms. und ein Brom. Präparate, Inaug. Diss., Tübingen, 1838.

Took in morning fasting, 5 drops in $\frac{1}{2}$ ounce distilled water; after an hour there was a slight nauseous reminiscence of the taste of the drug. At another time took 8 drops in 1 ounce water, holding the nose while swallowing; rough cough. After an hour repeated eructations. The appetite was diminished. The disgusting taste of the drug lasted all day. In the afternoon there was thirst,²⁷.

BRYONIA.

Authorities. 44, C. E. Goate, M.D., Lancet, 1868 (1), p. 610, a child, aged three years, ate freely of the berries; 45, E. W. Berridge, M.D., Am. Journ. of Hom. Mat. Med., vol. ix (New Series, 5), 1876, Berridge took 2000th (Jenichen) by olfaction for cough; 46 (L'Art. Med., 1877, 92), Recueil des Travaux de la Soc. Med. d'Indre-et-Loire, Tours, 1878, a man took as a purge an infusion of a large quantity of the root.

In about half an hour she became giddy, and during the night furious delirium supervened; the pupils became dilated; vomiting incessant, but not accompanied by diarrhoea. As morning approached, the delirium ceased, and she became comatose, with occasional subsultus tendinum,⁴⁴.—Occasional sudden sharp pain in left lower second bicuspid, somewhat as if the tooth were being pulled out; it was felt on and off during the day, worse morning and evening; in the evening it was sometimes intermixed with shooting in the tooth; the pain (of pulling out) was worse on pulling with the fingers (second day). In morning once the same pulling out pain, but less; in evening several times and more severe, worse by pulling at the tooth, and intermixed with shooting in the tooth; the pain sometimes ended in a shoot; the tooth is sound (third day),⁴⁵.—Great prostration; extreme coldness; numbness of the extremities; convulsions with tonic contractions of the extremities; opisthotonos; thorax immovable, inspiration associated with a remarkable depression of the pit of the stomach,⁴⁶.

BUFO.

Authority. 16, Dr. R. de Gumbleton Daunt, Dublin Med. Press, Sept. 25th (Pharm. Journ., Second Series, vol. iii, 1861-2, p. 291), the skin contains glands which secrete a milky glutinous fluid when the toad is put to pain or irritated; this is scraped off and dried in Brazil.

It produces incurable obstruction and enlargement of the liver, and a speedy death,¹⁶.

CACTUS.

Authorities. 10, Hahn. Month., 11, 1876, p. 509, W. McGeorge and M. B. Tuller, Report of Bureau of Mat. Med. to West Jersey Hom. Med. Soc.; 11, E. Clark, M.D., U. S. Med. Invest., New Series, 11, 1879, p. 345.

Sensation of constriction of the heart, as if an iron band† prevented its normal movement,¹⁰—I inhaled the odor of recently prepared tincture, and immediately thereafter rode to see a patient. When I had ridden a mile I had an uneasy sensation in my stomach like food difficult of digestion, but soon after entering the sick-room thought no more of my stomach. Thirty minutes later found it difficult to cross the sidewalk to enter my carriage. After ten minutes more the vertigo had increased, there was stricture about the chest and stomach, pain in the heart and head. Arrived home and threw myself on the sofa. Now there was violent vertigo, causing me to stagger and reel; violent pain in the head, chest, and stomach; head felt full as if there were congestion. Pressing pain in the head, like a great weight on the vertex, pressing in the temples, pulsating in the temples, ears, and eyes, as if they would burst outwards. Weakness of sight, objects were not seen clearly; intolerance of light and sound. Tongue dry and coated, slime in the nares and throat, very thirsty, satisfied with small quantity of water at one time. Profound nausea, lay for hours with my bowl near me, retching many times, with copious discharge of mucus. Terrible pain in the stomach, with pressure from without in; constriction of the scrobiculus, extending to the hypochondria, and as high up the chest as the fifth rib, as if encircled by a hot iron cincture, having involutioned edges of an inch in size, pressing more and more, from hour to hour, till respiration was most difficult and distressing. Some cough with much mucous expectoration, which greatly aggravated my sufferings. Attacks of difficult respiration, amounting almost to suffocation, with increasing hard and painful beating of the heart. The heart felt as if compressed violently, and as violently struggled to burst its bands. Pulse very irregular; could not suppress a groan, so great was my distress. At the same time severe pain in the spine, worse in the lumbar region, pressing down the glutei muscles to the inferior extremities. Tearing pains in the shoulders and arms; worse at first in the joints; after twenty-four hours worse in long bones. These symptoms increased for about twelve hours. Ipecac. was used for the nausea and the pain in the head; after several hours found no relief. Verat. vir. was taken with like *nil* results. Camphor was used in drop doses once in fifteen minutes for several hours, *nil*. A most miserable night was passed, not a symptom disappeared; but the nausea was less distressing, and the iron band was less distressingly close around me. The heart struggled less violently; the tongue was coated thickly, whitish; thirst considerable; the pains in the extremities remained unchanged. Three mushy motions from the bowels during the forenoon, with pain. During the second day I took Bryonia for the pain in the head with some relief. Night found me still in bed, unable to raise my head for vertigo; not a symptom had left its quarters, only a little less violent. During the second night I had a few hours of disturbed sleep, scared with dreams; awakened on the third morning somewhat refreshed, and was able to leave my bed for a few hours. All my remedies having failed to relieve the bone pains in my extremities, I now took Eupatorium perf., and was soon so far relieved that sleep came, to my great comfort. The fourth morning found me relieved of all severe suffering, but well in no part which had been the seat of suffering. In about ten days the symp-

† Lippe in his *Materia Medica* and translation of Rubini, makes this word read "hand," while in Allen's *Encyclopedia*, and Hale's *New Remedies*, it is written "band."

ptoms disappeared, and I look back upon the horrors of those days of anguish as one escaped from the greatest danger. I remained weak for several weeks, with frequent attacks of palpitation,¹¹.

CADMIUM BROMATUM.

Cadmium bromide, CdBr_2 .

Authorities. 1, G. A. Wheeler, M.D., Bost. Med. and Surg. Journ., vol. xcvii, 1876, p. 434, Mrs. N. put less than a teaspoonful into two-thirds of a tumbler of water, gave her mother, Mrs. R., half of it, and took the rest herself; 2, Dr. W. took what would adhere to his wet finger.

Found both ladies vomiting severely, and complaining of extreme pain and burning sensation in the stomach. Mrs. R. was also purging freely, though her daughter was not. The vomiting and purging lasted fully five hours, and during a part of the time the pulse was imperceptible in either patient. After this period the symptoms ameliorated, and they both fell asleep. For several days they were both confined to their beds, and were obliged to be extremely careful as to what they took into their stomachs. Mrs. R. has since suffered with some cerebral symptoms which betoken a tendency to apoplexy.¹—A severe burning sensation in the mouth, œsophagus, and stomach, which lasted perhaps an hour,².

CAJUPUTUM.

Authorities. 2, W. Cattell, Brit. Journ. of Hom., vol. xi, 1853, p. 169; 3, a proving submitted to the Faculty of Hahn. Med. College, by George Robins Parsons, M.D., of Kankakee, Ill., February, 1874.

During the summer of 1869 I made the following proving: Took 7 drops on a lump of sugar at 9 A.M., 10 drops on sugar at 2.30 P.M. (first day); 20 drops on sugar at 9 A.M., 22 drops in 3 ounces of water at 2.30 P.M. (second day); 25 drops in 3 ounces of water at 9 A.M., 35 drops in 4 ounces of water at 3 P.M. (third day); 40 drops in 3 ounces of water at 8.30 A.M., 50 drops in water at 3 P.M. (fourth day); 60 drops at 9 A.M., and got no particular symptoms; 70 drops at 2.30 P.M. (fifth day); stopped taking the drug, as I was afraid my throat would get so bad that I would choke to death (sixth day).

Mind.—I do not want any one to speak to me; nevertheless I like to be where I can see persons and hear their talk. Can't bear to look inside the books I usually study; can think of a thousand things in a minute (one hour after first dose, second day),³.—[60.] Want to walk in a slow and very dignified manner, and prefer to walk alone (one hour after second dose, second day),³.—Can't think of anything; ideas come slow; can't bear to do any kind of work or study (one hour after second dose, second day),³.—Can't think of study (eighth day),³.—Felt stupefied and completely intoxicated all the afternoon (after second dose, fifth day),³.

Head.—Feel dizzy when I walk, feel as if intoxicated, can hardly walk straight, feel as if I should stumble over my own legs (three hours after first dose, fourth day),³.—Sensation and feeling as if the head was as large as a half a bushel (soon after first dose, fourth day),³.—Full and dull heavy feeling all through the head (one hour after second dose); this feeling all settled in the occipital region (two hours after second dose), and

then gradually wore away (first day),³.—Head feels very dull (two hours after second dose, second day),³.—On rising in the morning a dull heavy feeling through the head, which got better after moving around (third day),³.—Head feels dull and heavy (twelfth to twentieth day),³.—[70.] Severe headache all over the head, with neuralgic pains in the malar bones and a stiff dry feeling in the jaws, on waking at 5 A.M. (sixth day),³.—Severe headache and prosopalgia, on rising at 5 A.M., which lasted until I was eating my breakfast, when all the pains went away suddenly (seventh day),³.—The most severe pain in the head and face that I had experienced at all came on at sundown, and lasted all night, after riding twenty-five miles in the afternoon and evening (eighth day),³.—Head and faceache almost every day and every other night; the pains are of a neuralgic character, and always go off suddenly on eating (twelfth to twentieth day),³.

Eye.—Eyes look very dull (ten minutes after second dose, third day),³.—Pungent pain in eyes; discharge of tears (from its being rubbed on temples),³.—Slight burning sensation in the inner corner of the left eye (almost immediately after first dose, fourth day),³.—Heavy feeling of the eyes, but do not feel sleepy (ten minutes after second dose, third day),³.—The upper lids feel as heavy and thick as common shoe leather (ten minutes after second dose, third day),³.

Ear.—The lobules of the ears are red, and the upper portion remains natural (half an hour after first dose, fourth day),³.

Nose.—[80.] During the day the alae of nose would *suddenly turn red*, clearly defined, and then suddenly go away (this symptom was especially noticed by Drs. Moore and Ruden), (sixth day),³.

Face.—Face has a yellow appearance (one hour after second dose, second day),³.—My face feels all puffed up (one hour after second dose, second day),³.—Can't hurt the skin of the face by pinching it (ten minutes after second dose, third day),³.—Rough feeling of the face (ten minutes after second dose, third day),³.—Stiff dry feeling in the jaws, with neuralgic pains in the malar bones, and severe headache all over the head, on waking at 5 A.M. (sixth day),³.—Neuralgic pains in the malar bones, with a stiff dry feeling in the jaws, and severe headache all over the head, on waking at 5 A.M. (sixth day),³.—Prosopalgia, with the severe headache (seventh morning),³.—The most severe pain in the face that I had experienced at all, with the pain in the head (eighth day),³.

Mouth.—Aching in unsound bicuspid when biting anything (seventh morning),³.—[90.] Tongue feels as if it filled my mouth all up (three hours after first dose, fourth day),³.—Cool and not unpleasant sensation in the mouth and pharynx, immediately (after second dose, first day),³.—Profuse flow of saliva lasting for twenty minutes (immediately after first dose, second day); lasting some minutes (immediately after second dose, second day),³.—Constant inclination to spit and hawk up large quantities of tough white mucus, which I could feel drawn through the nares (after first dose, second day),³.—Taste in the mouth as if there was lye in it (two hours after first dose, first day),³.—Acrid taste in the pharynx and œsophagus for a few minutes (after first dose, first day),³.—Salty taste in the mouth, after most intense thirst (six hours after second dose, fifth day),³.—Speech thick and slow (three hours after first dose, fourth day),³.

Throat.—It was with much difficulty that the drug could be swallowed, as the œsophagus seemed to close up and leave no place for it to go

down (after first dose, second day),³.—[100.] When eating breakfast, and on taking any kind of solid food, it would seem to go part way down the œsophagus, and lodge there until forced down by more food; the œsophagus seemed to be *entirely* paralyzed; a very disagreeable and painful sensation continued in the œsophagus after breakfast; the sensation was as if a portion of the œsophagus was swollen and very much constricted, and that there was something trying to be forced through it; I stopped taking the drug to-day, as I was afraid my throat would get so bad that I should choke to death; after dinner and supper my throat felt worse than ever, and especially on attempting to swallow solid food (sixth day),³.—A feeling in the œsophagus as if I had swallowed some lye from wood ashes, and it was making the mucous membrane peel off (two hours after first dose, first day),³.—Burning in the lower part of the pharynx (after first dose, second day),³.—Burning in the œsophagus, as if there was lye in it (after first dose, second day),³.—Can hardly swallow at all; the œsophagus feels sore all the way down; even to think about eating makes the œsophagus pain worse than ever (seventh morning),³.—Throat and œsophagus still feel very sore and closed up (eighth day),³.—The throat (which had got well on the eleventh day) commenced getting sore again on the seventeenth day, and by the twentieth day was almost as bad as when I was proving,³.

Stomach.—Have a good appetite, can eat anything, but don't feel natural when eating; the eating all seems to be performed mechanically (third day),³.—Most intense thirst, which lasted about an hour (five hours after second dose); followed by a salty taste in the mouth (fifth day),³.—On rising from a seat, sensation as though I should vomit (after first dose, second day),³.

Rectum and Stool.—[110.] Felt very much like passing stool at the usual time, but the rectum felt so paralyzed that no movement could be effected at all, in the morning (fifth day),³.—My bowels have always been very regular, and but one stool a day; to-day I had three stools, apparently natural; they were of a very bright-yellow color (fourth day),³.—Natural stool to-day, the first for forty-eight hours (sixth day),³.—Had a very small stool on rising, in the morning (seventh day),³.

Urinary Sexual Organs.—Urine clear and very much diminished (fourth day),³.—The urine is so clear that it sparkles and is very much diminished in quantity; in the morning, on rising (fourth day),³.—Urine still diminished in quantity, and has a milky appearance, and smells like that of cats (sixth day),³.—Urine still light-colored, and smells badly (seventh morning),³.—Had erections all night (sixth night), and for a long time after rising, but without the least sexual desire. Penis soon became all shrivelled up, and was not half its usual size (seventh day),³.—Sexual desire seems to be completely gone (twelfth to twentieth day),³.

Respiratory Organs.—[120.] Constant feeling of slight warmth clear down the trachea into the lungs (two hours after first dose, second day),³.—Voice hoarse, as if I had taken cold (two hours after first dose, second day),³.—Excessive coughing and strangulation (immediately after first dose, second day),³.—Coughing almost makes me vomit (after first dose, second day),³.

Chest.—Sharp steady pain through the superior and internal portions of the right lung; this pain was confined to a small spot, but seemed to go clear through the lung from before backwards (soon after first dose, second day),³.—Occasional sharp pains through both lungs (one hour after

second dose, second day),³.—Sharp pain through the superior portion of both lungs (almost immediately after second dose, third day),³.

Pulse.—Pulse 86 (normal 76), (one hour after first dose, second day),³.—Pulse 73 and very weak, after breakfast (third day),³.—Pulse 85, full and strong (ten minutes after second dose, third day),³.—[130.] Pulse 78 at 8.30 A.M. (fourth day),³.—Pulse 74 and very weak (half an hour after first dose, fourth day),³.—Pulse 72 at 2.30 P.M. (just before taking second dose); 80 (ten minutes after second dose, fifth day),³.

Neck and Back.—All the muscles of the neck are very sensitive to external pressure (twelfth to twentieth day),³.—Pain in the dorsal surface of the left scapula (soon after first dose, fourth day),³.—Stitching pains through right lumbar region when stooping forward (two hours after first dose, third day),³.

Extremities.—Almost complete loss of sensibility of the outer side of the thighs and dorsal surfaces of the forearms and hands; the inside of the thighs and palmar surface of the hands are exceedingly sensitive to pinching (ten minutes after second dose, third day),³.

Superior Extremities.—When I raise my arms up for anything they feel as if they would just drop right down in spite of me (two hours after second dose, second day),³.—Sensation as if my arms were tied close to my body; it takes all the will-power I have to raise them, or even move them; the left one is particularly numb; they feel as if they would tremble if I would let them (two hours after first dose, third day),³.—Arms feel like soaked wood hanging to me; they feel so heavy and useless that it takes all the will I have to raise them; after breakfast (third day),³.—[140.] Arms feel tired and heavy, in the morning on rising (fourth day),³.—Excessive weakness and lame feeling in the elbow-joints (three hours after first dose, fourth day),³.—Laming sensation in the carpal bones of the left wrist (two hours after second dose, second day),³.

Inferior Extremities.—While walking to supper and back, knees felt so weak that it seemed as if I should certainly have to stop and lie down and rest (four hours after second dose, third day),³.—Knees ached with pain, which continued nearly all night (four hours after second dose, third day),³.

Generalities.—After supper felt better and more like myself (second day),³.—Went out into the country ten miles, and felt first rate in the evening (fifth day),³.—Feel unusually well to-day (eighth day),³.—Was out in the country hunting, and had wet feet all day, and felt first rate at night (ninth day); still hunting and wading in the water all day, feel unusually well at night (tenth day),³.—For two hours there was a sensation as if I was just a little larger all over (a few minutes after first dose, first day),³.—[150.] A sort of trembling all over, together with a sensation as if I was a *good deal larger all over* (one hour after second dose, second day),³.—Sensation as if I was larger all over (ten minutes after second dose, third day),³.—General numb feeling, especially in the face (soon after first dose, third day),³.—Feel and walk as if I had taken too much lager beer; can walk straight, but feel so very unsteady (two hours after first dose, second day),³.—Heavy dull feeling all over, after going to bed (third night),³.—Feel dull and stupid, no energy to do anything, at 8.30 A.M. (fourth day),³.—When I get up to move around I just want to drop right down and lie there (three hours after first dose, fourth day),³.—Felt very weak, very much as if I were just recovering from a severe attack of sickness, in the morning (fifth day),³.—Did not hunt much to-day, but feel

completely tired out, and want to get back to the office (eleventh day),³.—Feel as if I was just getting over a hard spell of sickness (two hours after second dose, second day),³.—[160.] All the afternoon felt as if I was just getting over a drunken spree (after second dose, fourth day),³.

Sleep.—Frequent gaping and stretching (two hours after second dose, second day),³.—Did not sleep sound, heard the clock strike two (third night),³.—Several not unpleasant dreams during the night; through the later part of the dreams felt disposed to swear, and act like a rowdy (second night),³.

CALADIUM.

Authority. J. C. Bishop, M.D., *The Clinic*, vol. vii, 1874, p. 306; **6**, two children ate a few pieces of the stalk; **7**, the mother ate a piece about one inch in length.

Delirium.⁶.—Occasionally tendency to stupor, from which the patient would rouse up, cry, and talk incoherently, and perhaps drop into stupor again,⁶.—Intense headache,⁶.—[200.] Eyes injected and watery,⁶.—The face was flushed to a scarlet,⁶.—Lips greatly swollen, even to three times their normal size,⁶.—The mucous membrane of the mouth and fauces greatly inflamed, the saliva flowing profusely, with a choking sensation and a desire to swallow, which could be accomplished with difficulty,⁶.—The saliva as it poured from the mouth was copiously streaked with blood,⁶.—There was difficult articulation, patients talked as if they had stuffed their mouths full of mush,⁶.—There was intense burning pain in the stomach, with frequent retching, but no vomiting,⁶.—She said “her throat wanted to shut up, and felt as though ten thousand needles were sticking into it, while the pain kept shooting up towards the ears, with a burning and intense pain in the stomach,”⁷.—Respirations labored, irregular, and accelerated,⁶.—Pulse 120, very weak,⁶.—[210.] Jactitation of the limbs,⁶.—Temperature 103°,⁶.

CALCAREA FLUORATA.

Calcium fluoride, CaF_2 .

Fluor-spar.

Preparation, Triturations.

Authorities. **1**, A. J. Murch, M.D., *Am. Hom. Obs.*, 1864, p. 123, took $\frac{1}{2}$ grain three times per day, before meals, for three days, without effect; several days later took $\frac{1}{2}$ grain 3d dec. as before; (**2** to **5**, J. B. Bell, M.D., *N. E. Med. Gaz.*, 1874, p. 300); **2**, J. B. B., æt. twenty-nine years, took 4 drops 15th; **2 a**, same, took 10 drops 30th; **3**, J. U. W., æt. twenty-three years, took 4 drops 15th at 8.45 A.M.; **3 a**, same, took 1 drop 15th at 8 A.M.; **3 b**, same, took 1 powder 15th at 9 P.M. (first day); same at 6.30 A.M. (second day); **4**, I. S. H., æt. twenty-two years, took 5 drops 15th at 12 M.; **4 a**, same, took 1 powder of 15th.

Mind.—Some depression of spirits through the day (fourth day). All day an entirely unusual tendency to look on the dark side of things, with much depression of spirits. Feeling of anxiety about money matters, or thought would come to want, or would soon be “running astern” financially (entirely without occasion), (fifth day). Depression of spirits, and disposition to set a higher value on money than natural to him (*avarice*?).

Indecision (sixth day). Still low-spirited (seventh day). Thoughts still more upon financial matters than usual (eighth and ninth days).²

* **Head.**—Dull headache over the whole head, with faintish nausea at the stomach all the afternoon, better in the evening.³

Eye.—After writing some time, was no longer able to see distinctly, because of a blur or mist before the eyes, with some aching in the eyeballs, better when closing the eyes and pressing lightly upon them.³

Nose.—Sneezing twice (soon).²—Blowing of much mucus from the nose, with ineffectual desire to sneeze (second day). Occasional sneezing through the day (third day).²

Throat.—Hawking of mucus in the morning caused an attack of hic-cough, which was long and weakening, and recurred frequently all day (second day).⁴

Abdomen.—About midnight, or soon after, was awakened by a sharp pain in the right hypochondrium, under the eleventh rib, occurring in paroxysms of lancination; worse when lying on the painful side, so much so as to cause a feeling of bursting outward; better when lying on the painless side and when doubling up, and accompanied with restlessness, 8 A.M. Frequent attacks of the lancinating pains in the liver region, worse when sitting, better when walking about (fourth day).^{4b}—For some days much wind in lower bowels, worse when riding and towards evening, better after lying down at night (sixth day).^{4a}

Anus and Stool.—During the night awakened by itching at the anus from pin-worms, not felt to that degree since childhood, and rarely felt at all (tenth night).²—[10.] Slight diarrhoea; first part of stool natural, last part loose, with urging pain before stool (seventh day).^{4a}

Urinary Organs.—Increased secretion of pale urine (fourth day); urine scanty, high-colored, and turbid (sixth day).⁴—Rose twice in the night to pass urine profusely, which he never did before (first night); profuse emission of pale, watery urine from 8 A.M. to 3 P.M. (second day).^{2a}

Respiratory Organs.—Dryness in the larynx.³—Toward night dryness in the larynx, with desire to clear it, and some hoarseness, but no cough.^{3a}—Some tickling in the larynx and occasional hawking, with desire to clear the larynx, in the forenoon. Occasional attacks of tickling itching in larynx, inducing a hacking cough; worse from 3 to 4 P.M. (second day). Slight feeling of oppression and tickling in the larynx (third day). In the night itching tickling in the larynx, forcing a spasmodic cough, which was relieved, after a few turns, by hawking a little mucus from the larynx (tenth night).²—Itching tickling in the larynx, passing off after hawking up mucus from that spot (in ten minutes). The same tickling in the larynx, and hacking once or twice in the forenoon (second day).^{2a}—The tickling extends from the larynx about three inches down the trachea.³—Very hoarse after laughing (eighth and ninth days).²—Slight hoarseness. Reading aloud during the evening for about twenty minutes caused hoarseness and desire to clear the larynx (first day); hoarseness but less cough (second day).³—[20.] At 4 P.M. cough and hoarseness came on slightly (third day).⁴—Soon after dinner a hacking cough, occurring in one or two paroxysms at a time, caused by tickling in the larynx, as from a small foreign body. Not relieved by coughing. Desire to swallow from the same cause, but without relief.³

Back.—During the afternoon much pain and tired aching in the lower part of the back, with bodily restlessness; must walk about (second day). Tired aching in the back, with restlessness (third day).^{3b}—Tired aching in

the small of the back, as after a long ride, but did not ride far. Can sit in no position to relieve the back (third day),^{2a}.

Generalities.—On the afternoon of the second day there was oppression of breath, such as arises from taking cold, this continued throughout the proving, subject to fluctuations of intensity; at the end of a week there was a prickling, burning, suffocative sensation in the throat, which grew worse at night; cold drinks seemed to aggravate and warm drinks to palliate only for a short time; this feeling was less in the morning, but exacerbation occurred in the latter part of the day; much thirst, constipation, and consequent dizziness of head and dull headache; experienced irritability of bladder, frequent urging to urinate; urine causing smarting along the urethra, particularly at its external orifice; urine emitted pungent odor. On the eighth day discontinued the drug, but there was an increase of all the symptoms, the difficulty of breathing was such that it seemed as though the epiglottis was nearly closed, or that I was breathing through some thick substance, which permitted but slight ingress of air to the lungs,¹.—Feeling of fatigue all day (third day),^{2a}.

Skin.—Two days ago a "cold sore" commenced at the left corner of the mouth; to-day it is quite extensive. Had no cold and cannot recall ever having had a "cold sore" in his life before (twelfth day),^{4a}.

Sleep.—Since last dose has not slept well; has dreamed constantly. Last night jumped from bed in a dream, and tried to get out of the window, which woke him (fourth day),^{4a}.—Vivid and distinct dreams, also natural and connected, of the death of a relative, causing much grief and weeping (first night). Sleep unrefreshing on account of indistinct dreams of unsuccessful efforts to do various things, leaving an unpleasant impression on waking (second night). Dreams vivid and distinct of new scenes, places, books, etc. (third night). Vivid and distinct dreams of wholly new scenes and places, not unpleasant, but with a sense of impending danger (fourth night). Dreams not as distinct nor well remembered (fifth night). Dreams of death of his little daughter, and of great grief and weeping (sixth night). Dreams less (seventh and eighth nights),².—Dreamed much, unremembered (first night). Dreamed of cutting a woman in pieces, as an animal for salting. The details very distinct, and the dream seemed to continue a long time (second night),^{2a}.

CALCAREA PHOSPHORICA.

Authorities. 7, S. M. Cate, M.D., Trans. Am. Inst. of Hom., 1858, p. 54, took 4 grains 1st trit. at 12 M. (first day); 5 grains at 8 A.M. and 12 M. (second day); same at 9 P.M. (fourth day); same at 6 A.M. (fifth and sixth days); 6 grains at 6 A.M., 10 grains at 9 P.M. (seventh day); 8 grains at 6 A.M., 10 grains at 10 P.M. (eighth day); same at 6 A.M. and 6 P.M. (ninth day); 6 grains at 6 A.M., 8 grains at 9 P.M. (tenth and eleventh days); 8, W. B. Chamberlain, M.D., *ibid.*, took 6-grain doses of 1st trit.; 9, E. N. Jones, M.D., *ibid.*, took 3 grains at 9 A.M. (first day); 4 grains (second day); 4 grains at 6 A.M. (third day); same at 7.30 A.M. and 4 P.M. (fourth day); 6 grains at 7.30 A.M., 4 grains at 4 P.M. (seventh day).

Mind.—Gloomy and discontented (seventh day),¹.—For the last two days an obtuseness of the intellect; difficulty of performing any ordinary intellectual operations; when composing would write throat for tonsils, red for swollen, etc.; not clearly distinguishing the things under con-

sideration (ninth day),⁷.—The mind is less dull and muddy than for several days (twelfth day),⁷.—I have noticed too a great lack of definiteness in my memory; an inability to remember common symptoms of common remedies (twelfth day),⁹.

Head.—Heavy confused feeling in head as if about to ache (ninth day),⁹.—No headache this A.M., though a feeling of fulness and confusion continues, which has been an accompaniment of the headache all along (eleventh day),⁹.—Fulness and pressure in the head, aggravated by pressure of hat, lasting at intervals all day (after half an hour, first day),⁹.—Dull heavy feeling in the head (second day),⁹.—[650.] Dull pain in the head all day, increased towards night (second day),⁷.—Pain in head relieved by food (second day),¹.—Dull pain in the head at times through the day (ninth day),⁷.—Dull pain in the head, with confusion; pain increased on stooping; pain worse at times (eleventh day),⁷.—The headache has continued at intervals throughout the proving, generally being aggravated by eating. Yesterday and to-day the pain has been a beating pain, extending through both parietal bones (eleventh day),⁹.—Dull, sleepy, oppressive pain, embracing the whole head, but most in the cerebellum,⁸.—Dull, pressive, frontal headache, lasting all day (third day),⁹.—Slight momentary headache in forehead over left eye (third day),⁹.—12 M., sharp shootings through the temples, leaving a momentary soreness of the right temple after the pain had gone (eighth day),⁹.—Throbbing headache behind left ear (going off soon), (tenth day),⁹.—[660.] 12 M., headache principally on left side, pressive, occasionally throbbing, aggravated by stepping or quick motion (fifth day),⁹.

Eye.—Itching of the edges of the right eyelid for a short time (eleventh day),⁷.—Occasional aching pain in right eyeball (eleventh day),⁹.

Ear.—Shock of pain in left ear (third day),⁹.

Nose.—Fluent coryza during the forenoon, with dull pain in the head from 11 to 12 o'clock (sixth day),⁷.—Biting stinging in front corner of left nostril, succeeded by sneezing, and lachrymation from left eye, at 4 P.M., whole group disappeared within thirty minutes (second day),⁹.—In an hour biting stinging in front of corner of right nostril, accompanied by slight sneezing and lachrymation (seventh day),⁹.

Face.—Yellowness of complexion and sclerótica, with sleepiness (ninth day),⁹.

Mouth.—Bread had a bitter taste (second day),⁷.

Throat.—Dryness of the throat last night (twelfth day),⁷.—[670.] Yesterday, soreness of the throat; to-day, tonsils, uvula, and pharynx red and swollen, with pain increased by swallowing (ninth day),⁷.—Soreness of throat and fauces on swallowing (tenth day),⁹.—Inflammation of the throat continues; yesterday, moderate pain most of the time when swallowing; this morning the pain more marked, and inflammation gradually increases (eleventh day),⁷.—Sensation of emptiness or faintness in pharynx, continued from last night (third and fourth days),⁹.

Stomach.—Feeling of great hunger, at 4 P.M., very unusual (second day),⁷.—Increased appetite (third day),⁷.—Appetite diminished in morning, but good at noon (seventh day),⁷.—Rather less appetite than usual for three days past (twelfth day),⁹.—After breakfast, much loud belching of wind from the stomach (eleventh day),⁷.—Heartburn, lasting for some time after dinner (twelfth day),⁷.—[680.] Heartburn commencing about an hour after each meal, and lasting for an hour (thirteenth day),⁷.—Nausea, from 4 to 6 P.M. (second day),⁷.—Nausea and pain in the head increased

during pain in stomach (second day),⁷.—Sensation of fulness and repletion of stomach (second day),⁹.—Feeling in the stomach as if distended by food,⁸.—An empty sinking sensation at the epigastrium, at 7 P.M. (seventh day),⁷.—From 8 to 9 P.M., burning at the stomach, and rising of water into the mouth (waterbrash), (tenth day),⁷.—Sharp pain at pit of stomach, from 5.30 to 6 o'clock (second day),⁷.—Pain in stomach relieved by food (second day),⁷.—Dull pain in the epigastrium (ninth day),⁷.—[690.] Dull pain in the stomach, with soreness on pressure after dinner (fifteenth day),⁷.—Pains in the stomach still come on about an hour after each meal, with soreness of the stomach to pressure, and accompanied at times with loud belchings of empty tasteless flatus from the stomach, which affords relief (sixteenth day),⁷.

Abdomen.—Escape of considerable flatus, during the whole forenoon (third day),⁷.—Abundant emission of flatus (seventh day),⁷.—Emission of fetid flatus during the day (eighth day),⁷.—Frequent emission of fetid flatus (eleventh day),⁹.—Flatus still fetid and abundant (sixteenth day),⁷.—Sharp pain in abdomen around the navel, with a slight feeling of soreness, at 9 P.M. (second day),⁷.—Severe pain in region of transverse colon, for half an hour, at 3 P.M. (seventh day),⁷.—Pain in the middle of the abdomen, while and after eating, lasting half an hour; this pain abated after a copious emission of fetid flatus (ninth day),⁷.—[700.] Pains in the bowels to-day, most in the region of the ascending and transverse colon (sixteenth day),⁷.—Pains in the bowels still present, at times through the day, lasting a few minutes, and generally followed by flatulent emission, showing that the pains were caused by flatus (sixteenth day),⁷.—Sharp pain in the left hypogastrium, lasting a short time (eleventh day),⁷.—Shooting through the perineum and into the penis (eighth day),⁹.—After movement of the bowels, pain in the rectum, extending up five or six inches, lasting some ten minutes (ninth day),⁷.

Stool.—In the morning after rising, a thin, copious, fecal discharge (seventh day); diarrhoea early on rising (eighth day),⁷.—Stool soft, but otherwise natural (second day); soft pappy stool (third day); soft stool, but difficult of expulsion (fifth day); stool rather costive, expelled with difficulty (sixth day); painfully hard costive stool (eleventh day); stool soft (twelfth day),⁹.—Bilious, slimy, offensive fecal evacuations, lumpy and covered with mucus, as many as twelve stools a day, with little pain. Seemed to be more of a dysenteric character as the disease progresses. Stool in the morning, soon after rising, mostly bloody mucus. Slight pain, low down in the bowels. Frequent urging to stool, with small discharges, attended with pain in the head,⁸.

Urinary Organs.—Frequent profuse discharge of clear urine from 12 M. to 9 P.M. (fifth day),⁷.—The urine has continued profuse, frequent, and watery, since the fifth day; but no unusual thirst (ninth day),⁷.—[710.] Frequent and urgent desire to urinate, in the forenoon. The water pretty clear, and the aggregate quantity large. From 12 M., till 5 P.M., no opportunity to pass water. By 2 P.M., the desire was urgent, and the pain in the bladder considerable; the pain kept increasing from 2 to 5, at which time it was very severe in the bladder above the pubis, and in the prostate gland and neck of bladder. The water passed in a feeble stream, occupying considerable time. After all had passed, considerable soreness of the bladder, followed by frequent micturition. Though the urine had often been retained much longer without difficulty, it was evident that this group of troubles of the bladder arose from overdistension, and that the medi-

cine affected the bladder only through the increased secretion of urine (fourteenth day),⁷.

Sexual Organs.—Diminution of the sexual desire since the commencement of this proving (tenth day),⁴.—Diminution of the aphrodisiac sense still continues, and the whole function seems so weak as to be well-nigh removed, and has been since the second day of the proving. The excitement reaches a low pitch, at which it culminates from a slight cause, assimilating impotency (sixteenth day),⁷.

Respiratory Organs.—Dry hacking cough of a few minutes' duration, at 3 P.M. (seventh day),⁷.—Hacking cough and fluent coryza with the chill (tenth day),¹.—Involuntary sighing at times, for the last three days (eleventh day),⁷.—Inclination to sigh continues, and is still marked; I find myself making frequent involuntary inspirations; this has been for a number of days (sixteenth day),⁷.

Chest.—Dull pain in a small spot in right chest, near mammary gland, at 5 P.M., lasting half an hour (seventh day),⁷.—Considerable pain in right chest when pressed upon; some, but less in the left chest (ninth day),⁷.—A sharp pain about the sixth rib of the right chest, a little to the right of the mamma, worse on inspiration, lasting ten minutes; 5 P.M., a like pain at a corresponding part of the left chest (ninth day),⁷.—[720.] The pains above described in the chest felt very often through the day (tenth day),⁷.—Sharp pain for a short time in the region of the heart (8 P.M.), (tenth day),⁷.—The sharp pain in the left chest, about the seventh rib, and to the left of the mamma, followed by a dull pain, felt more when inspiring deeply, and this still continues (8 P.M.), (tenth day),⁷.—Pain in the region of the heart, violent at times (eleventh day),⁷.—Sharp pain in the region of the heart, when making an inspiration; most marked when taking a deep inspiration (eleventh day),⁷.—Sharp pain between the fourth and fifth ribs of the left chest, a little to the left of the heart, occurring frequently during the forenoon; so sharp and severe as to cut off the breath at times. The sharp pain would last ten or fifteen minutes, leaving a soreness for a longer or shorter time, and then come on again. The pain in the left chest has been troublesome through the afternoon; felt most during a deep inspiration, though not all the time present. Sharp pain in the right chest by turns during the same time (eleventh day),⁷.—Pain in the chest troublesome, though not constant through the day (thirteenth day),⁷.—The pains and soreness still felt about the chest, though not as constantly as several days ago (fourteenth day),⁷.—A sharp pain as though some round sharp instrument was pushing out the lower end of the sternum, for a short time, at about 12 M. (sixteenth day),⁷.—Pains in the chest still troublesome, passing from place to place; it is felt in the central part of the left chest in front, and passed thence under the left scapula, but is of a less acute character, but more and more aching. Pains still aggravated by a deep inspiration (sixteenth day),⁷.—[730.] Before rising in morning, sudden sharp cuttings or stitches in region of heart, continuing about five minutes, and then going off. Slight pain of the same nature, preventing a full breath, occasionally during the day (eighth day),⁹.

Neck and Back.—Crampy pain in nape of the neck, first on one side and then on the other, lasting for a short time (thirteenth day),⁷.—Sharp pain under the left scapula, towards the spine, at 9 A.M., continuing ten minutes, followed by dull pain in the shoulder-joint (second day),⁷.—Pain, with soreness, under the left scapula (thirteenth day),⁷.—The latter part of the night, and in the morning, dull, or pain as if from a bruise,

on each side of dorsal spine (fifth day),⁷.—Pain on each side of dorsal and lumbar spine, as from a bruise, when awakening, on the following morning, disappeared after exercise (eighth day),⁷.—The soreness of the muscles of the back continues on getting up in the morning (tenth day),⁷.—Sharp pain in region of lumbar vertebrae, and top of sacrum, lasting a short time, followed by soreness (eleventh day),⁷.

Extremities.—During forenoon, pain in all the limbs, worse in gastrocnemii, as from a cold (second day),⁹.

Superior Extremities.—Aching in the right arm, in the left temple, and shoulder-joint, lasting for a short time (second day),⁷.—[740.] Dull pain in the left arm below the elbow and wrist (ninth day),⁷.—At 11.30 A.M., pain in the right arm, from the elbow to the hand, with lameness of the wrist, all lasting till 9 P.M. (tenth day),⁷.—Pain in right wrist, with lameness as if bruised, at 7 A.M., lasting half an hour (third day),⁷.—Tremulous motion of the hands (eighth day),⁷.—Aching in pulp of left forefinger, sometimes extending up the arm, and giving it a sensation of weakness (continually all day), (eleventh day),⁹.—Pain in left forefinger to-day, as yesterday; felt more when driving (twelfth day),⁹.

Inferior Extremities.—Severe lame or bruised feeling in both nates (tenth day),⁹.—Pain in nates better (eleventh day),⁹.—Biting stinging in small spot on left nates (second day),⁹.—Shooting through the left thigh (eighth day),⁹.—[750.] Sharp pain in the tendons of the inner hamstrings, when walking, lasting twenty minutes, at 6 P.M. (ninth day),⁷.—Aching in outer side of right knee in bed, soon followed by aching in ball of left foot, relieved by motion, lasting about ten minutes (ninth day),⁹.—Drawing pains in gastrocnemii (third day),⁹.—Slight jerking pain in the right knee-joint,⁷.—Weakness of legs, especially below knees, as if from severe labor (second day),⁷.—Dull pain in the legs, from the knees to the feet, continuing for one-half hour (after one hour and a half, second day),⁷.—From 8 to 8.30 P.M., severe pain in front of right ankle, followed by a soreness about the sheaths of the tendons, most on extending and flexing the foot (second day),⁷.—Violent pain in the right toes and foot to the instep, lasting half an hour (fifteenth day),⁷.

Generalities.—Feeling of languor and laziness in the evening, and aversion to mental labor (thirteenth day),⁷.—Took the last medicine on Friday, and the symptoms were at their height on the following Sunday, and continued with a gradual abatement till the last of the week,⁷.

Skin.—[760.] (There is a small white ulcer upon a spot in right cheek which had been irritated by a broken tooth. Am uncertain if medicine had anything to do with it), (tenth day),⁹.—Burning itching of the outer ear, in the evening, lasting half an hour (fifteenth day),⁷.—Burning itching of the outer ears when in a warm room, after riding in the open air (which was not cold), and on putting the hand to the ears, was surprised to find they were not hot, though they were red. This burning has been troublesome all day when indoors (sixteenth day),⁷.—Itching of the left cheek, nose, and chin (second day),⁷.—A smart itching vesicle on the left wrist, at 6 P.M. (second day),⁷.—Violent itching of left wrist, with burning after scratching, at 9 P.M. (fifth day),⁷.—Severe biting itching in outer border of left axilla, momentarily relieved by scratching (ninth day),⁹.

Sleep.—Sleepiness all day, with yellowness of complexion and sclerótica (ninth day),⁹.—Very sleepy in the evening; slept sound for ten hours in succession (fourteenth day),⁷.—Restless sleep, disturbed by dreams (ninth day),⁹.—[770.] Restless sleep last night, disturbed by dreams, amorous and

fearful (tenth day),⁹.—Amorous dream (fourth day),⁹.—Amorous dream, and increased sexual desire (sixth day),⁹.—Amorous dream with emission (thirteenth day),⁹.—Last night dream, of travelling, of robbers, of an army of cats (eleventh day),⁷.—Vivid dreams of travelling (twelfth day),⁷.

Fever.—After dressing, seized with chills and shivering, lasting half an hour, till after a brisk walk of half a mile; with the chill a hacking cough and fluent coryza (tenth day),⁷.

CALENDULA.

Authority. 3. J. H. Fitch, M.D., copied from MS.; a man, aged twenty-seven years, took 15 minims of a strong alcoholic tincture, at 10.30 A.M. and 4 P.M. (first day); same at 11.45 A.M. (second day); same at 2.15 A.M. (third day).

Very irritable, touchy. Afterwards fit of despair and deep anguish (second day),³.—Nervous exhaustion (third day),³.—In a few minutes felt a disagreeable sensation in the occiput,³.—Immediately felt pain in the occiput (second day),³.—Itching of the scalp (after second dose),³.—An unusual amount of saliva in the mouth and fauces (after twenty-five minutes),³.—Scrapping and mucus in the throat (second day),³.—Disorder of the function of digestion,³.—[70.] Stool soft, covered with mucus, at 1 P.M. (third day),³.—Emission of semen (third day),³.—Slightly disagreeable sensation at the back of the neck, from the occiput (after second dose),³.—Pain in the left lumbar region; afterwards in lumbar region, both sides (second day),³.—Itching of skin (second day),³.

CAMPHORA.

Authorities. 72, Wm. Alexander, M.D., *Exper. Essai*, London, 1770; 73, Jas. L. Brooks, *Bost. Med. and Surg. Journ.*, vol. xix, 1838, p. 397, Miss B. took a dessertspoonful of a strong solution; 74, Mr. Clark, *Lancet*, 1842-3 (1), p. 300, a man, æt. thirty-nine years, ate about 35 grains of powdered C.; 75, Dr. O. E. Brown, *West. Med. and Surg. Journ.*, 1847, Mr. A., ate bits of gum C. during an evening; 76, J. H. Beech, M.D., *Penn. Journ. of Med.*, Feb., 1855, p. 367, a man, æt. fifty years, swallowed a quantity of nearly saturated alcoholic tinct.; 77, T. P. M., *Lancet*, 1857 (1), p. 384, a young lady, æt. eighteen years, swallowed a piece of the size of a marble; 78, A. Legat, M.D., *Brit. Med. Journ.*, 1875 (1), p. 242, a young lady, æt. twenty years, took a few drops of a solution; 79, Geo. Johnson, *Brit. Med. Journ.*, 1875 (1), p. 272, a boy, æt. fourteen years, took about 15 drops of hom. C., for a cold; 80, *ibid.*, p. 171, a lady, æt. thirty-five years, took 7 drops of hom. sol. of C. on sugar; 81, *ibid.*, a young lady took 25 drops for a cold; 82, *ibid.*, a man took eight doses of 3 drops each, within forty minutes; 83, W. Thursfield, M.D., *Lancet*, 1875 (2), p. 825, a child, just recovering from a fever, was given half an ounce of C. liniment; 84, *New Remedies*, 1876, p. 85, a lad, æt. thirteen years, ate two pieces of C. (about 120 grains); 85, omitted; 86, Geo. Johnson, M.D., *Brit. Med. Journ.*, 1877 (1), p. 607, a man, æt. eighteen years, took within six hours seven doses of three drops each, of hom. C. on sugar; 87, Chas. Halliott, *Lancet*, 1841-2 (2), p. 891, a woman, æt. thirty years, took about a scruple dissolved in rectified spirit of wine.

Great mental excitement, much resembling intoxication, with occasional delirium, with external laborious breathing, performed without the assistance of the abdominal muscles, great anxiety, languor, and giddiness, and occasional loss of sight, but the pupil perfectly natural; also a very distressing sense of numbness and tingling, with coldness of the extremities, so severe that she was at times quite unable to walk, and as she expressed it, "they felt as if they did not belong to her;" pulse 90, very feeble,⁸⁷.—Immediately a very faint feeling, which compelled her to lie down flat on the hearth-rug, and she nearly lost consciousness; this lasted about five minutes. When I arrived, her face was very pale, and her pulse was weak. She was very drowsy after she got to bed,⁸⁰.—He immediately became insensible; was soon found pulseless, with his extremities cold, and his face and lips pallid,⁷⁹.—[920.] Within five minutes after the last dose, without the slightest warning, he had a severe epileptic fit, in which his tongue was badly bitten. Ever since he has felt "queer," complaining of a peculiar cold sensation on the tongue, extending for about half an inch from the tip,⁸⁶.—A most vacant expression of countenance, eyes wandering about the room, speechless and powerless. Soon had a violent epileptic fit, which lasted for about two minutes. She went into a state of stupor, and in about half an hour vomited freely, the matter ejected smelling most strongly of Camphor. In the morning she complained of violent pain in the head and chest, and still the taste and smell of Camphor were most disagreeable; her mouth was slightly distorted,⁷⁷.—A fit of epilepsy, which lasted about ten minutes, followed by an extraordinary state of exhaustion. The extremities were cold, the surface was covered with clammy sweat; the pulse frequent and scarcely perceptible, and the pupil dilated. When roused he had scarcely power to articulate. Occasional suppression of the urine for three months afterwards,⁸¹.—Violent convulsions and nervous sequelæ, which continued for several months,⁸¹.—Convulsions; speechless, but perfectly conscious of all that was going on around him,⁷⁵.—Breathing slow, stertorous; pulse 98 and forcible; veins of forehead distended and tortuous; countenance livid, and covered with perspiration; convulsions (after half an hour), violent, racking the whole frame, in which opisthotonos was considerable; whole surface red with capillary congestion, the eyeballs injected and prominent for an instant, and then the eyes forcibly closed, loud moaning, grinding of teeth, and blowing of bloody saliva through the closed teeth (after three-quarters of an hour); this continued for about half an hour, when the opisthotonos gave place to rapid rolling over and over, now this and sometimes that way, burying the face sometimes for a moment in the bed, so that respiration was sometimes difficult,⁷⁶.—Burning of the mouth, throat, and stomach (immediately); convulsions (in fifteen minutes); black in the face; body arched backwards; the teeth so firmly clenched that nothing could separate them; the eyes wide open, pupils quite insensible to strong light, but neither contracted nor dilated; the eyeballs were rapidly rolling from side to side; the pulse was at times hardly to be felt; at others it was full and bounding; the breathing was gasping, with long intervals between each gasp (in three hours),⁸¹.—Immediately became very giddy and unwell; threw her arms about her sister, and was seized with strong convulsions. In about a quarter of an hour there was free vomiting, and she remained unconscious for some time longer. Some time later she complained of headache and giddiness, and was evidently confused; pulse quick; skin

moist,⁷⁸.—After four hours the child was observed to do something which elicited the remark, “Are you dreaming?” No reply was given by the child, and it was noticed that something was wrong with him; his eyes were fixed in a stare, and he stood motionless and unconscious. His brother took him up to carry him to an adjoining room, when he immediately became convulsed and perfectly rigid, with his head and legs bent back, so that he could only be placed on his side upon the floor. The convulsions increased until the flesh from the head to the shoulders became purple, and the pulse decreased rapidly until it could not be felt. The body then lost its rigidity, and was apparently lifeless; but in about ten seconds the pulse could again be felt, the convulsions returned, and the child foamed at the mouth. Applications of cold water brought him around in about four minutes: violent vomiting then ensued; he was hysterical for a time, but within an hour he was so far recovered that he could be put to bed,⁸⁴.

[930.] *First Experiment.*—I took one scruple of Camphor inclosed in a little of the pulp of tamarinds. It made no alteration on the height of the mercury in the thermometer at my stomach. But twenty minutes after, my pulse beat only 66; whereas, before I took the dose, it had beat 68; some time after this it was reduced to 65.

Second Experiment.—I took two scruples in a little syrup of pale roses; which immediately caused a sensation in my mouth, something like that occasioned by taking strong peppermint-water, but much more disagreeable. On looking at the thermometer at my stomach, the mercury, ten minutes after the dose, was fallen one degree; and my pulse, which before was 77, now only beat 75. Twenty-five minutes after the dose, the mercury was risen to the same height at which it had been before I took it, and my pulse was again at 77.

Long before this time, however, I began to feel an unusual lassitude and depression of spirits, accompanied with frequent yawnings and stretchings, which stole upon me by slow and almost imperceptible degrees; till, at the end of three-quarters of an hour from their first appearance, they were grown extremely troublesome. The mercury in the thermometer remained at the same height as it had done before the dose; but my pulse was now fallen from 77 to 67.

Soon after this, my head grew so very giddy, that it was with great difficulty I could walk across the room; when feeling myself, as I thought, stifled, I imagined the fresh air would remove that symptom, and therefore opened the window and looked out; but everything in the street appeared to me in the utmost tumult and confusion; in which, imagining that I was involved, I felt myself in danger of losing my balance, and tumbling from my position. I therefore staggered from the window to my bed, and having a book with me, read several pages of it; but had no distinct idea of any one sentence, but far less could I connect two or more of them together, so as to comprehend the meaning of the author. At last, being able to read no longer for the tumultuous motion which I perceived among the letters of the book, and finding it had no power to divert the attention of my mind from the uneasy sensations which disturbed me, I arose to see whether I could walk any better; but to my great mortification, found my head more confused, and could hardly walk any at all. I then returned to the bed, and being a little thirsty, called for some mutton-broth to drink. It being dinner-time, the servant, instead of bringing the broth, covered

the table as usual, not knowing that I was complaining. When the victuals were brought, I got out of bed again, and with no small reluctance swallowed a little of the broth, but could neither taste bread nor meat, on account of a nausea, which, however, was not accompanied with any inclination to vomit.

I now staggered again to bed, and took up the book I had left there, in order to make one more effort to divert the attention of my mind from the uneasy sensations I felt; but could not read, as the letters on the book formed only a confused group of unsteady images. Now the confusion of my head increased so much, attended with such a noise in my ears, that all knowledge of what was present, as well as memory of the past, was soon entirely lost in a state of insensibility.

Fortunately, about this time, one of my young gentlemen came into the room, who told me afterwards, that I desired him to shut the windows, and then threw myself backward on the bed, where I lay a few minutes very quiet, then started up, sat on the side of it, and made some efforts to vomit, but threw nothing up; that I then flung myself back again with dreadful shrieks, fell into strong convulsions, foamed at the mouth, stared wildly, and endeavored to lay hold of and tear everything within my reach. This outrageous fit was succeeded by a calm, something similar to fainting, with this difference only, that my color was very florid. The servants, concluding me to be mad, durst not come near me, and therefore sent for my brother, who lived at a little distance. When he arrived and spoke to me, I awaked, as I thought, from a profound sleep, and had just sensibility enough to know him. My pulse beat 100 in a minute. Though I was recovered so much from the fit I have just now described as to know every one about me, what is strange is, I was entirely ignorant of my own actions, as well as of the place where I was.

At this time, feeling myself very warm, I got out of bed, threw myself down on the floor, and thinking myself refreshed by the cold of it, called for some cold water, and bathed my hands and face in it. This refreshed me a little, and in some degree quieted a tremor which had seized on every part of my body. I drank plentifully of warm water, and soon vomited; and though more than three hours had passed since I had taken the Camphor, the greatest part of it was evacuated, undissolved, along with the water.

I mentioned before that I had not only lost all remembrance of my past actions, but also the knowledge of every present object; but I now began slowly to recover both, though in a manner so amazing, that my business, connections, and everything of the same nature, which I had entirely forgotten, at their first occurrence startled my mind, as if they were things I had never before been acquainted with; and what is still more extraordinary, after I knew every one of my family, I did not recollect the use of any part of the furniture of my own room; and every object on which I cast my eyes appeared as strange and new to me as if I had only that moment begun my existence.

Whether it was owing to the vomiting or to the Camphor I know not, but I was now affected with a pretty severe headache, which disturbed me a good deal all the evening. Between 5 and 6 o'clock the giddiness of my head, singing in my ears, excessive heat and tremor, which had been so severe on me before, were now considerably abated, but far from being entirely gone. About 7 o'clock Dr. Monro returned to visit me, and found

my pulse reduced from 100 strokes in a minute to 80. We now applied a thermometer to my stomach, and in half an hour the mercury arose two degrees above blood-warm; it was then changed from my stomach to the doctor's, and in half an hour the mercury fell more than one degree.

Between 8 and 9 o'clock, feeling myself still very much confused, I went to bed, and soon after fell into a very calm and easy sleep, which continued till next morning, with much less interruption than usual. When I awaked, I found my headache quite gone, though a little of the confusion in it still remained. Some time after this, upon going to stool, I was extremely costive, though I had not been so before; nor did I feel anything of it afterwards. All that day I had a very great soreness and rigidity over my whole body, as if I had been exposed to cold, or undergone some severe exercise; but this, with all the other symptoms, went off entirely in a few days. Hoffman mentioned a case where half a drachm given to a healthy man, neither augmented his natural heat, quickened his pulse, brought on thirst, or occasioned any uneasy sensation whatever; and another, where two scruples, almost as soon as swallowed, gave a remarkably severe headache, an extreme coldness, pale countenance, languid pulse, a cold sweat over the head, loss of memory, etc. Monsieur Duteau relates that one drachm was given to a girl in a very severe colic. After taking it, the pain soon became easier, but it brought on such an extreme cold over all her body, as resembled death, which could hardly be removed by the assistance of warm cloths wrapt round her, and the internal use of wine,⁷²—Violent headache, sickness, and inability to work for two months,⁷²—Violent pain in the head and through the temples, accompanied with an indescribable sensation of sinking and exhaustion, as though her breath were leaving her (immediately); flushed face, eye suffused with blood, pupils dilated, extremities cold, pulse full, soft, and about 40, breathing laborious, and a constant putting of the hand to the top of the head, and again to the stomach, as though suffering great pain in both of those organs, the brain and the stomach. In addition to these symptoms there was a total loss of speech for the time being; but notwithstanding the power of speech was lost, her hearing remained unimpaired, so that she understood every inquiry that was made, and nodded her head in confirmation or denial of all questions asked her (after four hours),⁷³.

CANNABIS INDICA.

Authorities. **28**, Th. Gautier, *History of Dreams, Visions, etc.*, Brierre de Boismont, M.D., Phil., 1855, chap. xiv, p. 334 (S. A. Jones, *Am. Hom.*, Obs., vol. xii, 1875, p. 409); **46** (Berridge), *Pharm. Journ. and Trans.*, 1841, vol. vi, p. 127, a medical friend tried it in several cases; **47** (Berridge), *La Presse*, June 22d, 1845, two dervishes took it after concluding their prayers; **48** (Berridge), Mr. Bartlett, *Pharm. Journ. and Trans.*, 1847, vol. vi, p. 70, a young man took a small dose of extract; **49** (Berridge), Chas F. Hodson, *Med. Times and Gaz.*, 1852, vol. iv, p. 450, a boy took 1 to 1½ grains extract five or six times daily for tetanus; **50**, *Bost. Med. and Surg. Journ.*, vol. xlvii, 1852, p. 218, a druggist took 6 grains; **51**, *History of Dreams, Visions, etc.*, Brierre de Boismont, M.D., Phil., 1855, chap. xiv, p. 334 (S. A. Jones, *Am. Hom. Obs.*, vol. xii, 1875, p. 409); **52**, John G. Bell, M.D., *Bost. Med. and Surg. Journ.*, vol. lvi, 1857,

p. 211, took a moderately large dose of extract with coffee; **53**, Obs. sur Le Chanvre Indigène, by Prosper Albert, Strasbourg, 1859, took 0.03 grm.; **54**, *ibid.*, took 0.02 grm.; **55**, *ibid.*, M. L. took 0.03 grm.; **56**, *ibid.*, M. L. took 0.15 grm.; **57**, *ibid.*, M. C. took 25 milligrams; **58**, *ibid.*, same, took 0.35 grm.; **59**, F. H. Brown, M.D., Bost. Med. and Surg. Journ., vol. lxxvii, 1862, p. 291, C. C. took 6 grains of solid extract within one hour and a quarter; **60** (Berridge), Mr. Shirley Hibbard, *Intell. Obs.*, 1863, vol. ii, p. 435, took about a drachm on a July evening; **61**, G. B. Kuykendall, M.D., *Phil. Med. and Surg. Rep.*, vol. xxxii, 1875, p. 421, took about 1 grain just before dinner; **62**, Berridge, *U. S. Med. Invest.*, 1876, N. S., vol. iv, p. 574, Mr. — took 1 drachm of tinct.; **63**, Mr. Maximovitch, *Méditsinsky Vestorick* (*Hom. World*, vol. xii, 1877, p. 226); **64** (Berridge), David Urquhart, *The Pillars of Hercules*, vol. ii, p. 122; **65**, Berridge, *Organon*, vol. i, 1878, p. 335, Madden and Desgenettes, general effects.

Mind.—I soon became conscious of a sense of disappointment. I said, "That was not Hasheesh, but some preparation of chocolate." I took my pen to write an indignant letter to my friend who had procured it, that he might know that I had not become an easy dupe to his plan for deceiving me. I was at a loss how to begin the letter, though otherwise always ready at writing, even when fatigued, as I then was, from sitting up two successive nights reading Jacob Behmen. For a moment I paused, considering, and then the parietal bones expanded widely, as if parting at the sutures, and again collapsed with a sort of shuffling sound. I said, "This is the result of fatigue; I have read too hard, I will go to bed." As I rose from my table I became conscious of an agreeable state of warmth and lightness, I felt as if I had taken Scotch whiskey. The room seemed larger than usual, and getting larger and larger still; some skulls of animals on the walls acquired colossal proportions, and the conviction entered my mind that I had realized an old dream of living in the midst of the monsters of the oolitic period, and that I had been awestruck for years, immovable, paralyzed, and with every faculty benumbed except that of wonder! I caught sight of my watch hanging in front of some papers on the wall, and it at once dispelled the illusion. I calmly looked at it, and found it was just twenty minutes since I took the Hasheesh. Immediately the watch expanded to vast dimensions, and its ticking sounded through my head like the pulsation of a world. I knew now for the first time that I was under the influence of the drug, and began to make a few notes in pencil. Suddenly my limbs seemed benumbed, my toes shrunk within my slippers, my fingers became like the long legs of a convulsed spider; I dropped the pencil and walked to the window. The landscape was so sublime that I forgot the cause of the illusion in my admiration of the magical scene. The horizon was removed to an infinite distance, but was still discernible, and the sunset had marked it out with myriads of fiery circles, all revolving, mingling together, expanding, and then changing to an aurora, which shot up to the zenith and fell down in sparks and splashes among the trees, which at once became illuminated, and the whole scene was grand beyond description, with fires of every conceivable color. All this time the landscape continued to expand; everything grew, as I looked on, to greater and greater proportions. Trees shot up higher and higher, their branches overspread the sky; they met together and became a confused mass: the lights, which just before had glowed on every hand, changed to a

general purple haze. A sense of twitching in every limb, coupled with a feeling of weariness and depression, caused me to turn aside and sit down. The twitching changed to a sharp pricking sensation, most violent in the extremities, and for the moment the thought occurred to me that I had been poisoned by Strychnine. I opened a drawer to find an emetic, but the drawer had gone, and in its place sat one of my antediluvian monsters grinning at me, a real ichthyosaurus, with a red cap on its head, and with drum and pandean pipes. For about six weeks, so at the time I determined the period, it played a monotonous tune, while I sat on the ground laughing and enjoying the idea of my fingers and toes being elongated into claws, when suddenly the thought seized me that I would destroy the illusion by an effort. I dashed at the monster, and my head fell on the handle of the drawer. The dream was dissolved; I could clearly understand the ticking of my watch, and the singing of a bird in the garden, were the real sounds which my fancy had changed to drums and pipes of my oolitic companion. I once more looked at my watch, and though years seemed to have elapsed since the spell began, I found the real period to be but twenty-five minutes. This last act of observing the time again threw me off my balance, I said, "Twenty-five minutes, twenty-five days, twenty-five months, twenty-five years, twenty-five centuries, twenty-five aeons; now I know it all, I am the alchemist who discovered the elixir of life in the dark ages, and I shall live forever. What is time to me? Yes, that was the elixir I took twenty-five minutes ago to experience a sensation, and there it goes round the room." It made me giddy to see it whirl like a wheel, of which I was the centre. There was a bust of Milton on the shelf, which had changed to the face of Jacob Behmen, and it sat on one of the spokes of the wheels, and smiled upon me with such a smile of peace and satisfaction that I shouted "Ha, ha!" The wheel revolved; it became brilliant with fiery coruscations; and by degrees the centre where I sat became the circumference, and I was whirled with it, my head opening and shutting, so that I could feel the cold air on my brain; my breath getting short and difficult, my chest falling, as if crushed by a weight, and my stomach gnawed by rats. This went on for ages; yet I knew all the while where I was, and how the whole thing had happened, and actually got up, rang the bell, and ordered some coffee, though not for an instant did the illusion cease, nor, so far as I ever learnt, did the servant who answered me discover any signs of my aberration. I thought of the coffee as likely to relieve the sense of oppression and disorder, which was now fast dispelling the illusion by its reality. I felt my pulse and tried to count it. I knew afterwards that it was full and rapid; but at the time the throbs were like the heaving of mountains, and the numbers would multiply themselves, so that as I counted "one, two, three," they became "one, two, three years, centuries, ages," and I literally shrieked with the overpowering thought that I had lived from all eternity, and should live to all eternity, in a palace of colored stalactites, supported by shafts of emerald resting on a sea of liquid gold, for this was now the appearance of things, and the gnawing at my stomach suggested the idea that I should be starved to death, and yet live the deformed wreck of a deluded man. At this moment there was a tap at the door, and the servant entered with the coffee. It was in a huge tankard, chased all over with dragons, that extended all round the world, and I saw the odor of it play round her in circles of light, and for at least an hour she stood smiling and hesitating where to place it, because my table

was covered with papers. I very calmly removed a few of the papers, and heaved a sigh that dissipated the dragons, made the odors fall in a shower of rain, and she put down the tray with a crash that made every bone in my body vibrate, as if struck by ten thousand hammers. I know not whether she was alarmed at my appearance, but she stood apparently aghast, and her rosy face expanded to the size of a balloon, and away she went with the rapidity of lightning, with Mr. Green in the car, and I stood applauding in the midst of thousands of lamps, which I had time to note, as the scene continued during a period which seemed indefinite, were all glow-worms, which I could touch, and they communicated to my fingers phosphorescent sparks, as if they had been rubbed with Lucifer matches.† But I knew this was unreal, and I drank the coffee with the most perfect composure, though I felt it difficult to pour it out without spilling it, and the cup came to my lips as if it were the rim of a caldron, seething with a stew of spices and nepenthe; and amid the steam I could see the fierceness and tartness and prima materia of Jacob Behmen, all displayed, so that there was an end of the mystery, and I could see into his brain, as he now seemed to be looking into mine. The moment I sipped the coffee it darted through me, and caused sensation of insupportable heat. The gnawing sensation of stomach and contraction of chest gave way to a sense of pricking, most violent in fingers and toes, and yet, though painful, this was all pleasant; and though I could now collectively observe the objects around me, yet they would transport themselves to immeasurable distances, and keep continually dilating in size; and though I looked at my watch, and saw that only forty minutes had elapsed, yet there was a secret persuasion in my mind that a period of at least forty centuries had gone by since I broke off a fragment of Hasheesh, and committed myself to this dream. There seemed to be now only one effect of the drug remaining, and that was a sense of warmth all over the body, and a tendency in my head to expand and fill the room. But my arms dropped down; I could not keep them up without great and painful effort. I finished the coffee, experienced less of the pricking sensation than at first, and then rose and went to bed. I could walk without difficulty, though my legs were immensely long, and felt as if they would presently be cramped, so that I should cry out. As I undressed myself, my clothes would fly from me far away into boundless space, and become wandering stars; the buttons of my vest glittered in the firmament like Orion, but much more vast and splendid. I did not dare to look out of the window. I endeavored to control myself, for I began to feel a sense of dread. As I got into bed the bed extended. As I lay down at full length, I myself extended; and as soon as I shut my eyes I felt that I covered the space of the whole earth. I had a sense of indescribable pain all over me. My skin seemed to move to and fro upon my flesh; my head swelled to awful dimensions, and I parted in two from head to foot; became two persons, each throbbing, breathing hard, sighing loudly, and lost in a commixture of ethereal, yet agonizing, colors and sounds. These seemed to continue for ages; but I was really asleep, and I never could call to mind at what time I went to

† Only a few days before I had found some glow-worms in the garden, and on handling them, found my fingers tipped with a dull phosphoric glow. This probably gave rise to the illusion. In fact, I afterwards traced many of my sensations during the paroxysm to previous events, and almost believe the illusions are the result of abnormal memory.

bed, or at what point of the illusion sleep came upon me, but I always supposed it to be when I felt myself parted in twain, and immersed in light and music. The next day I woke early and seemingly unrefreshed. I lay some hours pondering upon the strange effects the drug had produced, and found it difficult for some time to prevent the intrusion of some broken fragments of the visions from taking possession of me; but when I had dressed and breakfasted I felt as well as usual. In a second experiment, when unaffected by fatigue, I noticed that every physical and mental power seemed intensified. The illusions were more agreeable and more ridiculous. I was the subject of a thousand different moods in the course of a few seconds, which, as in the former case, seemed ages; and these moods were nearly always swallowed up in some strange vision of walls receding, landscapes rolling away to a horizon they never reached, skies opening to views of boundless space, and sudden flashes before the eyes of visible odors, sounds, and ideas. The most remarkable feature of this paroxysm was a feeling that my soul was too large for my body, and must expand it to suitable dimensions. This pained me. I gasped for my breath, and felt my skin stretch and crack, and my joints fly like the snapping of huge beams of timber. These illusions became instantly the foundation of others. The cracking of my skin became suddenly a display of fireworks, and the snapping of my joints the beating of gongs. Still pleasurable sensations prevailed; old memories were revived as pictures; and in many respects the effects resembled those of *Opium*. But with *Opium* there is a more entire and settled acquiescence in the illusions, and the ideas are more continuous and connected. With *Hasheesh* there is a rapid succession of new scenes and startling combinations. When there is no pain, the mind is literally whirled away in a succession of ravishing delights, and is yet all the while conscious that the whole affair is a deception. This paroxysm was soon over. It ended in a joyous feeling, in which life seemed lengthened out beyond the natural term, and all around me were objects of transcendent beauty, which I had the power of resolving into realities by an effort of the will; and it seemed that by successively using this effort the spell was broken, and the effect of the drug entirely destroyed. The third dose (of 4 scruples) was the last. I took it at midday, when in usual health and spirits. I at once went out and proceeded across Finsbury Square, in the direction of the city. It seemed that about a quarter of an hour had elapsed, during which I had a comfortable sense of warmth and an increasing tendency to open my mouth for air, though I was not aware of any difficulty of breathing. "Now," said I, "this is pleasant; I shall have a glorious time of it." Immediately a voice shouted, "There he goes, he is always inflated." I was at once conscious that I was observed by passers-by to be expanding rapidly, and I felt myself rise from the ground and walk above it. I halted, and by an effort of the mind, collected myself, and found that the voice was that of a man selling some wares in Moorgate Street, who had not even noticed me, nor had any one else. But the thought occurred immediately, "This is a delusion; I am expanding, and cannot touch the ground." For a moment, it might be, but it seemed an indefinite period, I saw the whole city spread out before me as a diorama. The church bells rang joyously; the houses were illuminated; the horses had gold and silver trappings; the people were waltzing, singing, laughing, and playing with fireworks. I again exerted my will, and felt a disgust at the meanness of such a performance, so far

short did it come of my own sense of sublimity ; for I felt exalted, and had the utmost consciousness that I was able to separate the false from the true, though I really could not. I retraced my steps, and was accompanied home by triumphal bands of music, shouts of triumph, running footmen carrying colored flambeaux ; and I gradually quickened my pace till I ran too, only touching the ground at intervals, but for the most part swimming through the air ; yet knowing that I walked as other people, and knowing too that the ordinary sounds and scenes of streets were the foundation of the delusion. I reached my home and went to my study, with a sense of satisfaction that I was now in a safer position than in the streets under such an influence. I sat down and began to fill a pipe with Turkey tobacco. The pipe would lengthen out so that I could not reach the bowl, yet I did reach it ; and, in like manner, the tobacco-jar seemed deep enough to serve for one of those used in " Ali Baba, or the Forty Thieves ;" and it suddenly became a row of jars, and out of them leaped the forty thieves, with monkeys' faces and red jackets on.† I lighted my pipe, and as the cloud rose, I saw all the party had lighted their pipes, and were all proper Arabs, and I was in the midst about to tell them a tale. By some strange freak they all suddenly collapsed, and became the double of myself, and yet they continued smoking. I now saw in the stomach of my double a huge cake of Hasheesh, which presently shot up into his brain, and I felt a hot throbbing of the head, and the thought occurred, " Why, if he has the Hasheesh, have I the burning, and how can that shadow smoke so calmly with a mass of poison in his brain ?" I rose and propounded my double a problem, " How in the end, matter and spirit would be completely identified and made as one ?" I was assured, in reply, that a sense of lightness would accomplish all, and I became as light as a feather ; I swayed to and fro, I was lifted up, sparks flashed in my eyes, fire was emitted from my fingers, head, and stomach, and presently there was an awful crash, and I came to myself with the thought that I was going mad. I saw the pipe in fragments at my feet, and the burning tobacco on the hearth-rug. I coolly picked it up with my hand, took another pipe, dropped the smoking tobacco into it, and saw my double again. This time he was the body and I was the shadow. I felt myself to be nothing. I was the soul, and beside me was the body. I thought I had now solved the problem of matter and spirit ; I said, " They are only two forms of the same fact ;" and I laughed aloud, and they all laughed with me, the umbrellas I mean, for my umbrella hung on a hat-rail, and it peopled the room with offspring ; and away went the furniture and ornaments and books, all carrying umbrellas, dancing, whistling, and splashing water from the pools upon me, till I stamped my foot and smothered myself with sparks and planets and auroras, and sunk back with a pain in the head that literally dispelled the delusions, and created a momentary alarm. I was now beset with prickings ; I seemed to swell ; I had a difficulty in breathing, and yet it was a pleasant one. I put the tobacco away, inspected everything about me, and thought of trying the effects of reading aloud and attempting to sing ; but I found my strength gone, I was spellbound, so light I could not govern my movements, and by degrees I began to discover that the illusion was over, that it had left me tremulous, and with a low pulse, and requiring refreshment for my

† I had seen a monkey on a barrel-organ during my walk, and tested my sanity by noting all its zoological features, in order to determine its species, but I lost it suddenly.

recovery. The first act, on fairly reviewing the case, was to seize the fragment of Hasheesh which remained and fling it up the chimney. It went up, and did not even return again. I saw it go into the sky, and become a bird, for the chimney was glass, and I could see through all its windings. I now felt that madness had really come upon me, and I began to bathe my temples and drink soda-water, and soon discovered that I had had a second paroxysm, for there lay the Hasheesh among the shavings in the fireplace. I applied a match; there was a glorious blaze; and I now saw it dissolve into a grand procession of colored lights, that died away and left me quietly and collectedly reflecting on the whole affair. This was the third paroxysm. There was yet one more, but of a trivial nature, and I had now done with Hasheesh.⁶⁰—About half an hour after taking the medicine I was at the dinner-table, and we were all laughing and jesting, and enjoying our dinner meal with more levity than usual, I taking the lead in the merriment. I was just about finishing dinner, when suddenly I felt a thrill pass through me; the room and the dining-table seemed to rise up and swing, or float about. There was a sensation of lightness and dreaminess connected with everything. I had been conversing, but in the beginning of these sensations had leaned upon my elbow on the table, which attracted the attention of my wife, who asked what pained me. I answered that there was no pain, but that I experienced a peculiar kind of sensation which I hoped would soon pass away. Summoning up my will, I arose and walked into the parlor, and took a seat, and tried to compose myself; but the sensations continued to come on. For a few seconds after the first thrill, I thought all was going to pass off, but now the symptoms were increasing in intensity. I arose and went to the glass to look at myself, and to notice the appearance of the pupils of my eyes. Up to this time I would not believe I was under the influence of Cannabis. My condition rapidly grew worse, worse, I say, for my sensations were of the most disagreeable and horrible nature possible. I felt as if reason was being hurled by violence from its throne. Sensations and states of consciousness, rather than ideas, were wildly passing through my mind. I said to my wife, "I am in a terrible situation, something must be done." I called for an emetic. While it was being prepared, I was all the time becoming more and more restless and agitated. I arose and walked out into the hall, and thought to myself what is the use of me running around like a wild man, and returned and sat down in my chair, but could not be easy. The emetic was brought and I swallowed it. I then said, "Give me some warm water," and started for the kitchen. Some one proposed a hot foot-bath of mustard-water; I said, "Yes, let it be got immediately." A few minutes more and I was in the kitchen, before the stove, with my feet in a boiler of hot water. By this time my condition was awful in the extreme. My own voice sounded strangely to me when I spoke, while the voices of those about me sounded as if obscured by a gauze or veil over my senses; the sounds seemed far off, dreamy, and unreal. I was beginning to have a sort of double or even triple consciousness. It seemed as if I were living three lives at once. Anything spoken to me, immediately seemed to have been an age ago. The few movements I made were governed by the will, and yet they seemed automatic, as I could not feel myself move. Indeed, I seemed to have lost my body and become all dreamy imagination. I moved occasionally, but had no physical sense of doing so. After swallowing a quantity of warm water, I unbuttoned my vest, but did not even seem to touch the buttons, and yet

I must have had some sense of feeling, for I did not watch the movements of my hands. I saw with my eyes, but nothing was natural. I looked at the wall and objects around; an impression was made upon the sensorium, and the visual impression seemed hurried off at lightning speed, then immediately the same impression was made with some different phase, while an age almost seemed to intervene between these changing states of consciousness. A moment seemed an eternity; the most terrible depression came on. My mental states and sensations seemed to move in circles. Rapidly, smoothly, and noiselessly, I seemed to be carried down a psychical maelstrom. The voices about me sounded in my ears as a dull dreamy droning, although I understood all that was said. Dissolution seemed imminent. Rapidly I was sinking down the horrid maelstrom of my own imagination, each revolution bringing me nearer to the pointed bottom below, which I thought would be death. I still could get out, by great effort of the will, as it seemed to me, short sentences; but when I spoke only three words, before the third was uttered the first seemed to be far in the distant past. When I spoke, I seemed as if started from a dream; a flash of light came before my eyes, and everything seemed to rise up suddenly before me. I remember that the floor seemed to be sloping up before me, and pitching off behind. I now labored fully under a triple consciousness, two dreamy and unreal, and underlying these, apparently, was my real self, obscured by the intoxication upon me. I seemed to pass successively from one state of consciousness to another. When in one state, I remembered the successive changes of sensation in that state that had occurred previously. Noise or movement seemed to transfer me immediately to another state of consciousness. In this new state, the recollection of the sensations in the other state were dim and soon forgotten, while I seemed to remember back in the line of consciousness in which I then was. Through all these wonderful psychical phenomena, I preserved a good degree of rationality. I remember distinctly to have reflected, "What is my condition?" "How long is it going to last?" I told the attendants Ipecac. would not vomit me, to get mustard and water. When they were going to give me lemonade, I tasted it, and said, "It is not sour enough, put in Citric acid, it is the acid that is antidote to the Hasheesh." During all this time I was sitting stupidly in a chair, before the stove, making but few movements. I lost all correct idea of time; a moment seemed an age. I thought they would never get the mustard for me. After drinking the mustard mixture I called for warm water, and thought they would never get it ready, and called for it, as I thought, about once every fifteen minutes, supposing they had forgotten to bring it. My wife says I spoke incessantly, repeating my request as fast as I could. As I recollect now, it seems to me I called only three or four times for anything, and then at long intervals. I still seemed to be sinking down into the maelstrom, and was nearing the apex below, when suddenly I gave a retch, and began to vomit. While in the very act of straining to vomit I felt more natural, because, I suppose, of the change of circulation within the cerebrum. The vomiting over, I felt I was about gone, and said, as it seemed to me, with an awful effort, "Put me in bed, I shall know nothing in a few minutes more." At one time I really thought I was entering the world beyond, and was wondering how things would appear, when something changed the current of my ideas. Just as I started to bed, I had reached the climax of wretchedness. A few minutes before I had taken some lemon-juice, which they brought me instead of the Citric acid solution I

had called for, and now the symptoms seemed to begin to abate. The revolving panorama of sensations seemed to move more slowly, and each revolution appeared to bring me back, up, more to the light, and to myself again. I was now in bed, had walked from the kitchen, but did not feel the floor; with a feeling of relief, I said, "I shall get all right again." My hands now began to become cold, and then my feet, and I requested to be kept warm, and asked to have my hands rubbed. From this on I dozed in a dreamy, intoxicated manner; for a few seconds I lost myself in sleep, and then started up, seeming to have just completed another round, ascending the same spiral maelstrom which I had previously descended; still I had no correct idea of time; my hands were still cold, and I asked the attendants to chafe them, and then dropped into a doze and after, as it seemed to me, half or three-quarters of an hour, I aroused and repeated the request. Those who were attending me say I was incessantly repeating the request. They put warm bricks to my feet, and I immediately dozed off again, and in less than half a minute asked them to put something warm to my foot, saying I was nearly frozen. I was reminded that it had already been done a moment before. I remembered the circumstance, but it seemed to have been at least two or three hours before. From this on the symptoms of intoxication gradually abated. After dark, at 7 o'clock, I could converse very readily, but time dragged very slowly. Toward morning I slept somewhat more naturally, but was nervous, and felt aches in my back and neck, and soreness of my sides, from vomiting. Next morning my appetite was poor, my head ached, and I felt dull all day, much the same, I imagine, as a man after a drunken spree. During the whole operation of the medicine the pupils of my eyes were natural, and after the first few minutes the color of my face was the same as usual. My pulse was at first rapid and strong, afterwards not so strong, but faster than common; my hands and feet were cool, from the end of the first to the middle of the third hour. At no time was there any disposition to spasmodic movements of any kind; the disposition was rather to lie inactive and quiet. I was about six hours under the influence of the drug, but the climax of the symptoms was reached in about an hour and a quarter.⁶¹—At 7½ (two hours after last dose), noticed that he felt somewhat nervous and dizzy, and that he gave wrong change to a customer. A few minutes after, when out on an errand, felt an irresistible inclination to run; at the same time a sense of "contraction" of entire genito-urinary organs and great desire to urinate, with much strangury on passing water; also excessive dryness of fauces, coming on suddenly and with much thirst. On returning to his place of business, found it impossible to keep still, on account of an irresistible desire to be constantly on his feet. Within a few minutes spasms supervened, during which, at times, the flexors and extensors, at times the abductors and adductors of the whole body, were thrown into violent alternate action. While sitting in his chair, one minute his feet would beat a tattoo on the floor; and the next, his knees beat violently together. The spasms increased in severity and frequency for half an hour, and then gradually diminished, after emesis had been induced. Patient could by strong exercise of his will, restrain the spasms; but on fresh access they were much more violent. They were unaccompanied by pain; but after a time, he experienced a sense of weariness, as after the spasms of tetanus. Patient describes his mind as being "dull" and somewhat confused, but says that at no time did he lose consciousness in any degree. At no time any delirium. At but one time did he experi-

ence any mental disturbance, when he thought the vomitus was the head of a hippopotamus, and again a bunch of earthworms. He noticed that, if anything ludicrous were said or done, or any idea suggested, which required more than common exercise of the mind, the spasms were considerably intensified. The senses of seeing and feeling were somewhat diminished. Had tinnitus aurium. Conjunctivæ congested. Pulse, at 8.30, about 140, somewhat irregular in character and frequency,⁵⁹—At 11 o'clock three persons had taken the liquid; on the expiration of two hours no sensible effect being produced, another dose was administered. The following are the phenomena which occurred in two of the gentlemen in the course of another half hour: Mr. A. K. resisted the action of the substance, and, as he said, experienced a slight oppression of the head and epigastrium; perhaps, also, the second repast which he took, all these gentlemen having already breakfasted, may have entirely neutralized the substance; an examination of the state of the pulse was neglected at the beginning of the experiment; its acceleration subsequently and the state of the pupil sufficiently demonstrated the effect of the substance. Mr. B., on whom the medicine first took effect, experienced a dryness of the throat and twitching of the limbs. The pulse was 96 in the minute, the face flushed. Mr. B. soon closed his eyes in order to collect himself; his ideas appeared to develop with extreme rapidity. At one moment he offered the singular phenomena of a *double man*; he said he heard music on one side and conversation on the other; but this symptom did not continue. The music, which was performed by M. C., did not appear to act in any particular manner on the subject of experiment. At this time his pupils were much dilated. Interrogated as to his sensations, M. B. said they were very voluptuous. He felt particularly gay and happy; he wished to be alone in a quiet place; he had great repugnance to speak or to move; all countenances appear to him ridiculous. Until now Mr. B. had conversed; he moved about, and sometimes laughed violently, but all his actions resembled those of a person excited by alcoholic liquor. Suddenly he flung himself on a couch, refused to answer any more questions, and begged to be left alone, and not disturbed in the delicious sensations he experienced; he had spasmodic movements in his members, and in the diaphragm; he sighed, moaned, laughed, and wept by turns; the pulse 120 a minute, the face much flushed. The persons present began to feel uneasy, but were reassured on hearing Mr. B. repeat several times that he was happy and did not suffer. Dr. Cottercau watched the symptoms with the greatest minuteness. Mr. B. appeared the whole time to have the most agreeable symptoms proceeding from the epigastrium. All the phenomena presented were those of ecstasy; his features bespoke the greatest happiness; he could not find language to express his feelings; he would not wish to leave his present condition he is so happy. "How much I thank those who gave me that delicious drink." "Tell me what you feel," said one of the party, "I cannot express it." The influence of Mr. B.'s temperament was remarked throughout the experiment; he is possessed of great sensibility. In speaking of gay subjects, and pointing out lively and agreeable objects, his ideas harmonized instantly; he shouted with laughter, and evinced the greatest gayety. It was evident in this case that he was under the influence of the person who spoke to him, who could direct his ideas as he chose. Mr. B.'s sense of hearing had become extremely acute; he very distinctly heard what was said far off and in a low voice. In the midst of his ecstasy he neither lost consciousness of persons nor things. He replied

correctly to all questions addressed to him, and knew those who surrounded him; but it was evidently painful to him to speak; he seemed to wish to enjoy his ecstasy undisturbed. At half past four, the pulse is 90; his ecstatic reveries continue; he is not conscious of anything relating to earth; his mind is perfectly free, and yet he has some delicious sensations.

Mr. A. De G. proposes to give him an antidote and bring him back to his natural state; he says that the sensation of happiness will last a day or two. All whom I have interrogated, who have tried the experiment, have assured me that they have not felt any distress on the following days, but, on the contrary, a great sensation of happiness. M. D., the second subject, came to the meeting with the conviction that the substance could not produce any effect upon him, and with the firm intention to resist its action. No symptoms occurred for two hours and a half. The physiognomy of M. D. is grave. His character is serious, he rarely laughs, and devotes himself to metaphysical studies. Towards 2 o'clock his pulse was 100; his heart beat rapidly; several persons felt its pulsations. M. D., who until now had been very calm, and conversed with the company on various subjects, exclaimed that he was delirious; he began to sing, took out his pencil, and endeavored to write down what he felt. Here are some fragments of his notes: "It is droll; my feelings are very vivid; the idea of being useful without fear, made me decide on taking this excellent drink. I am singular; they are laughing at me; I will not write any more." He threw away his paper; his delirium increased. The features of M. D. became very flexible; he laughs sardonically; the expression of his eye is animated, his face red, his pulse 120, his pupils dilated. Like Mr. B., he looks extremely happy; laughs, sings, gesticulates, and speaks with extreme volubility. His ideas follow one another with rapidity; it is the derangement of gay mania. But in the midst of this abundance, mobility, and variability of ideas, those which form the basis of his studies predominate. These serious subjects are intermixed with pleasantries, bon mots, and puns. His tongue is dry; he spits frequently; his inferior extremities are slightly convulsed. This is a very singular delirium. Like Mr. B., his hearing and sight are very acute. He has no notion of time and space, but recognizes every one present, and replies correctly to questions put to him. He draws out his watch, and says with the greatest calmness, "It is such an hour." A multitude of ideas seem to fill his head, which he cannot express; he says, "You might take an ear, or an eye, if you could give me another tongue to make known what I feel." The pulse lowers; it is softer, and beats but 90 in a minute. The delirium continues; water is given to him; he exclaims: "That will make the frogs come, who will drink up the liquor." Incoherent sentences follow with inconceivable rapidity. The character of the delirium changes. He seats himself in a corner, closes his eyes, and talks to himself; he looks inspired. We surround him; he talks of sciences and gives definitions; then, like a man trying his powers, he pronounces a few words, and immediately recites some twenty very harmonious verses. Being under the impression that they were some well-known stanzas, we omitted to note them down; but on some one asking him if they were not by Victor Hugo, he replied, "No!" "They are then your own?" He gave a sign of assent. His countenance expressed gayety and satisfaction; his skin became very pallid; his pulse 100; his eyes closed, which he opened on the request of his brother; the pupils less dilated. He left off improvising to speak of foreign countries. We had been told that in these experiments the phenomena

of second sight would be developed. M. D. described countries and cities which he had visited with as much correctness as though they were then before him; he perfectly recollected the peculiarities which he had noticed in his travels; in like manner he told us that he saw the stones of the Pantheon at Naples, raised, and drew a very practical picture of the scene which had struck him. But notwithstanding all our questions, he could not describe places with which he was unacquainted. He saw objects which had no existence. His brother inquired if he could look into his brain. "No, it is empty;" then he added: "How do you think I can see into your brain? It is veiled, there are objects between it and me." He then arose, saying, "All this is a dream; this state of aberration has given a livelier impulse to my ideas, but has not added to my knowledge." The delirium, which for some time had been confined to a series of ideas, now became general again; he sang, laughed, and talked with great vivacity; he experienced no suffering, and said he was very happy. This state lasted for four hours and a half, when I left the party. The pulse at 90; the spitting frequent, and a constant desire to drink;⁵¹—One of our companions, Dr. —, who had travelled much in the East, and was a determined opium eater, was the first to yield to its influence, having taken a much larger dose than the others; he saw stars in his plate, and the firmament in his soup dish; then turning his face to the wall, talked to himself, and burst into fits of laughter, with eyes flashing, and in the highest state of glee. I felt perfectly calm until dinner was over, although the pupils of the eyes of my other friends began to sparkle strangely and acquire a most singular turquoise tint. The tables being cleared, I (still having my senses) arranged myself comfortably with cushions on a divan to await the ecstasy. In a few minutes a general lethargy overcame me. My body appeared to dissolve and become transparent. I saw the hasheesh which I had eaten, distinctly within me, under the form of an emerald, from which thousands of little sparks were emitted; my eyelashes lengthened indefinitely, twisting themselves like golden threads around little ivory wheels, which whirled about with inconceivable rapidity. Around me were figures and scrolls of all colors, arabesques, and flowing forms in endless variety, which I can only compare to the variations of the kaleidoscope. I still occasionally saw my companions; but they appeared disfigured, half men, half plants; now with the pensive air of an ibis, standing on one leg, and again as ostriches, flapping their wings, and wearing so strange an appearance that I shook with laughter in my corner; and, as if to join in the buffoonery of the scene, I commenced tossing up my cushions, catching them as they descended, and twisting them round with all the dexterity of an Indian juggler. One of the gentlemen addressed a discourse to me in *Italian*, which the hasheesh by its extraordinary power delivered to me in *Spanish*. Questions and answers were most rational, and touched on different matters, such as the theatres and literature. The first stage drew towards its termination. After some minutes I recovered my calmness, without headache, or any of the symptoms which accompany the use of wine, and feeling very much astonished at what had occurred, when I again fell under the influence of the hasheesh. The vision this time was more complicated and extraordinary. Millions of butterflies, whose wings rustled like fans, flew about in the midst of a confused kind of light. Gigantic flowers, with crystal calyxes, enormous hollyhocks, gold and silver lilies arose, and burst into flowers around me with a crackling sound like that of bouquets of fireworks. My hearing was prodigiously developed. I heard the sound

of color; green, red, blue, and yellow sounds struck me with perfect distinctness. A glass upset, the creaking of a chair, or word spoken, however low, vibrated and resounded like rolling thunder; my own voice appeared so loud that I dared not speak for fear of throwing down the walls or bursting like a bomb; more than five hundred clocks chimed the hour with their flutelike voices. Every object gave forth a note of the harmonica or Æolian harp. I swam in an ocean of sound, wherein some passages of the *Lucia* and *Borbiere* floated like little isles of light. Never before had I bathed in such beatitude; I was so encircled by its waves, so transported from all things earthly, so lost to self, that odious, ever-present witness, that I comprehended for the first time what might be the existence of elementary spirits and angels, and souls released from this mortal coil. I was as a sponge in the midst of the sea; every instant waves of happiness washed over me, entering and departing through the pores; for I had become permeable, and even to the smallest capillary vessel my whole being was filled with the color of the fantastic medium in which I was plunged. Sounds, perfumes, and light reached me by multitudes of beams, delicate as a hair, through which I heard the magnetic current pass. According to my calculation this state must have lasted for three hundred years, for the sensations succeeded each other so numerous and powerfully that the real appreciation of time was impossible. When the attack was over, I perceived that it had lasted a quarter of an hour. What is very curious in the intoxicating effect of the hasheesh is that it is not continuous; it comes and goes suddenly, raises you to heaven and places you again on earth, without any gradual transition; like madness, it has its lucid intervals. A third attack, the last and strangest, terminated my Oriental sojourn. In this my sight was doubled. Two images of each object were reflected on my retina, and produced a complete symmetry; but soon, the magic paste being entirely digested, acted with more power on my brain, and I became completely mad for the space of an hour. All kinds of Pantagruelic dreams passed through my fancy; goat-suckers, storks, striped geese, unicorns, griffins, nightmares, all the menageries of monstrous dreams, trotted, jumped, flew, or glided through the room. These wore horns terminating in foliage, webbed hands; whimsical beings, with the feet of the arm-chair for legs, and dial-plates for eyeballs; enormous noses dancing the Cachuca, mounted on chickens' legs. For myself, I imagined I was the parrot of the Queen of Sheba, and imitated, to the best of my ability, the voice and cries of that interesting bird. The visions became so grotesque that I was seized with a desire to sketch them, which I did in five minutes, with inconceivable rapidity, on the backs of letters, cards, or any pieces of paper on which I could lay my hands. One of them is the portrait of Dr. —, as he appeared to me seated at the piano, dressed as a Turk, with a sun painted on the back of his vest. The notes are represented escaping from the instrument in the form of guns and spirals, capriciously intertwisted. Another sketch bears this inscription; "An animal of hereafter." It represents a living locomotive, with a swan's neck terminating in the jaws of a serpent, whence issue jets of smoke, with two monstrous paws composed of wheels and pulleys; each pair of paws has a pair of wings, and on the tail of the animal is seated the Mercury of the ancients, who is confessing himself to be conquered, notwithstanding his heels. Thanks to hasheesh, I have painted from nature the portrait of a goblin. Even now I fancy I hear them whining and mowing at night in my old buffet.²⁸—For two hours no results at all were experienced. At

this time a dryness seemed to commence at a particular spot in the throat, and a feeling of warmth throughout the abdomen. These were not the results of disordered sensation, for a clammy mucus soon began to be secreted, though the huskiness of the throat still remained. Up to this time there was not the slightest excitement or confusion of thought. Suddenly, however, an idea, having no connection with the train of thought passing in the mind at the time, appeared, as though suggested by another person, and then was gone again as suddenly as it came, leaving upon the mind the same feeling as when one escapes from a dream or a deep reverie. The same thing was repeated two or three times, at intervals rapidly diminishing in length. Even now I can hardly believe but it was the result of strained attentions to my physical sensations, for the gentle warmth of the abdomen was rapidly becoming a burning heat; still, however, not by any means unpleasant, and the dryness of the throat extended to the tongue. I had taken this drug with great skepticism as to its reputed action, or at any rate, that it was greatly exaggerated, and I accordingly made up my mind not to be "caught napping" in this way again, and to keep careful watch over my thoughts. But while enforcing this resolution, as I supposed, I found myself, to my own astonishment, waking from a reverie longer and more profound than any previous. From skepticism to the fullest belief of all I had read, was but a step. Its effects so far surpassed anything which words can convey, that I began to think I was on the verge of narcotic poison; yet, strange to say, there was not the slightest feeling of inquietude on that account. I resolved to walk into the street. While rising from the chair, another lucid interval showed that another dream had come and gone. While passing through the door, I was aware of having wandered again, but how or when I had permitted myself to fall into the reverie, I was perfectly unconscious, and knew only that it seemed to have lasted an interminable length of time. These singular attacks of mental disturbance recurred often, and lasted longer, till the lucid interval between them was reduced to a mere instant's conscious duration of thought. This condition came on so rapidly, that in less than fifteen minutes from the time of my being aware of the first mental disturbance, the power of controlling the thoughts was almost completely lost. All ideas of time and space were especially bewildered, and I realized completely for the first time the idea of some metaphysicians, that time, properly speaking, has no existence except in connection with a succession of mental operations or sensations. The most trivial circumstance, the slightest noise, gave rise to trains of thought, which went bounding from subject to subject, completely emancipated from the rules which ordinarily govern mental operations, till suddenly some other circumstance would give an entirely new direction to them, and the last series of imaginations would seem to have lasted from eternity, even while the eye was fixed upon the clock, the hand of which had not perceptibly moved. Now a phenomenon still more singular, began to exhibit itself. I felt that, in spite of all exertions, I was beginning to receive the suggestions of a disordered fancy for real objective facts. Intellectually, I know that the spinal column could not be a barometer, in which mercury had usurped the place of the spinal cord. Yet in another sense, over which the operations of the intellect were entirely powerless, I felt that it was a barometer. An unpleasant sensation in the lumbar region suggested the idea of a heavy column of mercury pressing upon it, and at the time, and under the circumstances, the transition to the idea of a barometer was easy and natural. There was

no balancing of arguments in the arrival at this conclusion ; there was no half-way period of doubt and uncertainty, to emerge into full credence. At the instant the idea occurred at all, it commanded the assent with the same fulness as when in perfect mental health does the idea of our own existence. The thought certainly occurred that it was a delusion, but it made no more impression than the suggestion would, that the sense of sight was a figment of the brain, and objects seen had no existence, except in the imagination. This belief was not a transient one ; it was the first hallucination to appear, and continued with varying degrees of intensity, as the thoughts were more or less occupied with other objects, till all others had disappeared. The belief in the reality of the vision was never for an instant absent ; it pervaded the whole being, and was often the point on which the thoughts turned seemingly for a long time. The painful attempt to regulate these disturbed states of consciousness, was soon given up, and half involuntarily, half by a species of moral compulsion, the whole psychical nature surrendered itself without further struggle, to the fullest and most complete belief in the actual existence of a thousand hallucinations. During this time the thoughts were becoming more and more disordered ; ideas, between which, apparently, there was not the slightest connection, thrust themselves in, till finally their rapid occurrence, and the loss of that sense of governing the mind which we ordinarily possess, induced the belief that I was the victim of diabolical agency ; that some terrible demon had taken possession of my whole intellectual being, and identified himself with every thought, in the same way that a man might direct the physical movements of a child. The feeling of utter powerlessness to check the wild current of thought was complete, and there was a sensation as though, if there had been the ability, the will could not be exercised. The firmest intentions were forgotten in an instant. There seemed to be no difference between the idea and the expression of it in words. A moment was long enough to forget whether it had been expressed or not. The sound of persons whispering in the room, brought with it the belief that they were laying some plot. It was not a vague suspicion that they were intending some injury, such as whispers and glances might excite in any one, but everything they had said, the particulars of the whole plot, were present, with the same vividness and overpowering conviction as they always are in true hallucinations. The *fantasia* had now arrived at its height. It was an hour and a half since the first sensation of excitement and wandering commenced. About the same time passed before it had completely subsided. The mental phenomena in this stage were as remarkable as while the effects were coming on. One after another the delusions disappeared as rapidly as they came ; not by any exercise of the gradually returning regularity of thought, but suddenly, with a bound, so that it was surprising to have believed a moment before what now appeared so absurd.⁵²—*Majoun* produces effects like *laughing-gas*, except that they last for many hours. Some cry, some laugh, some fall into drowsy listlessness ; some are rendered talkative and funny. They see visions, imagine themselves reduced to poverty, or become emperors and commanders of armies, the natural disposition predominating in the derangement. Men under its influence were pointed out to me in the streets. They walked along with fixed eye, heedless of all around them. Some take it daily in small quantities, producing, as one of them described it, "a comfortable state of mind," without appearing to impair the general health. Under its influence the mouth is parched ; it is not in their power to spit ; their eyes become red

and small; they are ravenous for food. A young English clergyman took some *Mujoun* as a sweetmeat. Some hours passed without any visible effects, when a musician, who had the faculty of strangely distorting his features, came in dressed as a nummer. The clergyman took him for the devil, and a most laughable scene ensued. Next morning, on inquiries after his health, he said he had slept soundly and agreeably, "as the windows and doors were bolted." Later in the day the effect disappeared entirely, and he seemed to recollect the circumstances with a confused pleasure, describing various things that had never happened. In my case I fancied my head an inverted pendulum, which it cost me a great deal of labor to keep straight, when I could resist no longer, and let it go, and it went back as if a blow had been discharged. I struggled against each relapse out of a sense of politeness towards the company, of which I did not fail to inform them, notwithstanding their roars of laughter. The back of my neck was a pivot; there was a heavy upper weight on the top of my head, and the pendulum was swinging between my legs; but the pendulum was attracted upwards to the table, and I had to struggle to keep it down by keeping my head up. The swinging fit was accompanied by bursts of laughter. I derived great pleasure from allowing my head to go back; but the laughter was unlike any mortal merriment; it seemed as never to end, and to press me, and to lead up to a mountain-top. When any one put his hand behind my head, fearing the effect of the jerks, or that I should throw the chair over, I was very much annoyed, because it disturbed, as I said, "the isochronism of the oscillations." I afterwards saw a similar effect produced on a European who did not know what he had taken. He was constantly throwing back his head and looking at the ceiling, and exhibited no other symptom, which only made this the more ludicrous. After keeping the party for four hours in a state of continual convulsion, I became irresistibly drowsy, and was moved away to bed. This operation sickened me, and brought on a slight vomiting. The instant I was in bed I fell asleep, and slept without intermission for nine hours; and then awoke, perfectly recovered and fresh, with a feeling of lightness, and in high spirits. One of the most remarkable effects was that it seemed to lay bare your inmost thoughts, and to present a mirror on which was reflected every act of your life, and that you were constrained to reveal and confess it all. One describes the effects on a party thus: "We were eight, and seven took to laughing, and one to crying, and the more he cried the more we laughed, and the more we laughed the more he cried, and so we spent the night, and in the morning we went to bed." The master of a Portuguese vessel to whom it was given without his being aware of its nature, thought himself bewitched, and his crew were on the point of securing him as deranged. He saw a ship stranded on the bar, and ordered out his boats to her assistance; he then saw the devil cooking in the caboose, and with the demeanor of an insane person, was all the while reasoning on the evidences of his insanity."⁴—At 6.58 P.M. I took 0.6 gram of Egyptian Hasheesh, and half an hour after 0.4 gram in addition. Before taking, pulse 72, at 7.10, pulse 80. First sensation, pendulum-like oscillations in the head. 7.20, pulse 84; a feeling of flow of blood towards the upper part of head, and a strange sensation of contraction, and a kind of collapse within myself; the pendulum-like oscillations in the head increasing. 7.40, an irresistible inclination to laugh, loud laughter, without any particular cause, tendency to rapid movements; pulse 84. I took several quick turns up and down the room, and then sat down. 7.55, a feeling of heat and prick-

ing in the head, sensation of coldness and numbness in the extremities, which are cold to the touch, and an indefinite feeling of melancholy and uneasiness; occasional starts, without any visible cause, like those of electric shocks; pulse 96. Playing on the piano, performed by one of those present, produced a magical effect; it seemed as if the sounds were wafted from a great distance, that every sound had its peculiar life, a special fullness and expressiveness: the sounds seemed to come with fearful rapidity from an endless distance, and to be reflected immediately in the ear; in a word, an ordinary performance seemed equal to that of some eminent pianist, and I thought myself a refined and profound connoisseur, calmly enjoying the playing of some distinguished musician. 8.10, pulse 104, full; the sensation of heat in the head and pricking in the temples increased; I seemed to hear a loud noise, like that of a waterfall; suddenly the nature of the noise changed, and it seemed to proceed from a number of vehicles driving in the street; then again the noise became like what is heard at the close of a performance at a theatre, the rumbling of vehicles, shouts of men, all combining into one general roar; these sounds suddenly disappeared, and give place to the booming of cannon, and reports of guns at a manoeuvre. I cut these sensations short by the force of my will, and took a quick turn in the room. I felt a violent thirst. After drinking a glass of water, I sat down on the sofa, and closed my eyes at 8.30. Scarcely had I done so, when I felt a remarkable buoyancy and flexibility in all my body; before my eyes appeared a whole series of variously-tinted luminous figures, rapidly vanishing; their shapes being in the highest degree undefined; then appeared a row of more or less well-defined shapes. The most varied and most luxuriant pictures of nature ever seen by me in reality or in drawings, transported me into a magical world; I thought I was in some virgin forests of South America, then in some cities of Switzerland, and then amidst the ocean, and again amongst heaps of ice and snow, etc. An entire series of reminiscences of childhood, the faces of friends and acquaintances, and the faces (known to me by portraits) of authors, savants, poets, politicians, etc., all these became blended in my head, presenting a kind of phantasmagoria, and the most variegated picture. All these sensations passed rapidly and distinctly before me, and I felt so enraptured that I begged to be allowed to plunge into this fantastic world, and to leave off dictating my feelings. This state lasted till 9.20. During this time those who were present observed that my face was hot, red, and moist; pulse 108. On my recovery, I got up with the intention of walking across the room, but noticed that my gait was unsteady, and that I was swerving to the left, and that the upper and lower extremities of my left side were benumbed. I drank a little water and wine. At 9.45 I experienced sharp and occasionally shooting pains in the loins and in the region of the kidneys. These pains, as well as a feeling of nausea, made my state very uncomfortable; I endeavored to induce vomiting by tickling the root of the tongue, but did not succeed. It was nearly midnight when I sat down to supper, and ate with a great appetite. At 1 A.M. I went to bed, and my first sensation was that I was flying from an enormous rock into a fearful and dark abyss. I fell asleep at once, and slept very soundly. It was 11.30 A.M. when I awoke, with a feeling of heaviness in the head, with full remembrance of the previous day, and a sensation of emptiness and incapacity for thought. Whatever I did appeared endlessly long; my words, and the conversation of others, seemed too prolonged, whereas in reality it appeared that I spoke as usual. I went out into the street to

take an airing, but the farther I went the more it seemed to me that I was walking a very long time, and that the houses and people were all flying away from me. Making an effort over myself, I took the first vehicle and drove back home. On my arrival, I at once lay down and slept till evening. On awaking I felt much livelier. The urine which I had collected during the experiment had a peculiar odor, something like that of *Cannabis indica*. During the day, according to my own observation, as well as that of others, my face was exceedingly pale, the pupils dilated, the expression that of great illness. It was only on the next day that I was able to take to my ordinary occupations,⁶³—Great weight about the head, followed by irresistible bursts of laughter, during which, however, perfectly conscious of all that he was doing, and felt, and thought. He says: "I was astonished by the crowd of brilliant and novel fancies and ideas that rushed through my brain, returning over and over again. Imagination and perception were developed to their fullest extent. All the principal incidents of my life passed before me like a flash. This condition of mind lasted two hours. Dreams and reveries of the most pleasing character filled this extraordinary tension of the intellectual faculties. Then came a deep calm sleep, which terminated this singular fit or mental hallucination,"⁵⁰.—They saw several lunatics in Cairo Hospital who had lost their reason from the use of *Hasheesh*,⁶⁵—[900.] They were without provocation seized with a paroxysm of frenzy, and killed and wounded several on board the ship,⁴⁷.—Loss of sense of existence of his own body; he seemed suspended in the air; transformed into a cylinder or sphere; he seemed to see a yellow color like the color of chromate of lead over everything, changing to violet and green,⁵³—Hallucinations,⁵⁸.—Excited, loquacious, and gay,⁶⁷.—Involuntary cries,⁵⁴.—Very vivacious talking was the first symptom,⁵³.—Incoherent speech,⁵⁵.—Constant talking and laughing,⁵⁶.—Incoherent loquacity,⁵⁶.—Loss of memory,⁵⁵.—[910.] The action was powerfully narcotic; he felt all the symptoms of intoxication,⁴⁸.—Attacks of lethargy, with an unconscious stage,⁵³.—Loss of consciousness of the centre of gravity, and seeming as if on the point of falling,⁵⁴.

Head.—The peculiar sensation of giddiness produced by it is increased by walking about, and subsides during rest,⁴⁶.—Whirling in the head,⁵³.—Heaviness of the head,^{55 57 58}.—Tension and heaviness of the head,⁵³.—Tension in the head,⁵⁴.—Sensation of tension in the brain,^{54 57}.—Pressure in the temples,⁵⁸.

Eye.—[920.] Eyes brilliant (after one hour),⁵⁵.—Eyes injected,^{53 55 58}.—Divergent squint,⁵³.—Prickling in the margins of the lids,⁵⁷.—Lachrymation,^{53 54 58}.—Conjunctivitis,⁴⁹.—Conjunctiva red,^{54 57}.—Pupils dilated (after one hour),^{55 57 58}.—Vision confused,^{54 56}.

Face.—Face congested,⁵⁶.—[930.] The face became red, with efforts to vomit,⁵³.—Trembling of the lips,⁵⁴.—Constriction of the jaws,⁵⁸.—It seemed to him as if he must forcibly compress the jaws,⁵⁴.

Mouth.—Tongue dry,⁵⁴.—Tongue dry, covered with dry mucus,⁵³.—Mouth dry,^{53 58}.—Dryness of the mouth and throat,⁵⁴.

Throat.—Dryness of the throat,^{53 55}, etc.—Sensation of devouring fire in the pharynx and œsophagus,⁵³.—[940.] Burning in the throat on inspiring air,⁵³.

Stomach.—Nausea,⁵³.—Nausea and efforts to vomit after eating,⁵⁶.

Stool.—Next day bowels did not act,⁶².

Respiratory Organs.—Respiration rapid,⁵³.—Dyspnoea,⁵³.

Chest.—Sensation of constriction in the chest,⁵⁴.

Heart and Pulse.—Palpitation,^{54 57}.—Intense palpitation of the heart,⁵³.—Pulse 100 (before taking); 140 (after one hour); 92 (after three hours),⁵⁶.—[950.] Pulse 80, regular (before taking); became very rapid, 130, and irregular; afterwards small contracted,⁵³.—Pulse 75 (before taking); ran up to 120, became small and irregular,⁵⁴.—Pulse 70 and regular (on taking); 115 (after one hour),⁵⁵.—Pulse 78, regular (before taking); afterwards 120,⁵⁷.—Pulse 72 (before taking); rose to 125, and became irregular,⁵⁴.

Neck and Back.—Rigidity of the nape of the neck,⁵⁴.—Beating in the nape of the neck,⁵⁷.

Extremities.—Contractions of the arms and legs⁵³.—Sensation of stiffness in the limbs,⁵³.—Trembling of the arms,⁵⁴.—[960.] Incoördination of the movements of the lower limbs,⁵³.—Involuntary contractions of the tendons of the feet,⁵³.

Generalities.—Trembling on moving either the hands or feet,⁵³.—Muscular feebleness,^{52 53 56}.—General lassitude,⁵⁷.

Fever.—Frequent general shuddering,⁵³.—Extremities cold,^{53 54}, etc.—Chilliness in the limbs,⁵⁴.—Pyrexia,⁴⁹.—Skin dry and hot,⁵³.—[970.] Heat of the face,⁵⁴.

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Authorities. 19, Andrew Robertson, Pharm. Journ., vol. vi, 1846, p. 72, quotes Mr. Bartlett, a young man took a small dose of the extract; 20, Wm. F. Daniell, M.D., Pharm. Journ., vol. ix, 1850, p. 364, effects of smoking Dukka; 21, Obs. sur Le Chanvre Indigène, by Prosper Albert, Strasbourg, 1859, the author took 3 grams of the alcoholic extract of the leaves an hour after eating; 22, *ibid.*, a girl, aged twenty-five years, took 200 grams of the extract of the leaves; 23, *ibid.*, the author, at another time, took 3 grams of the extract; 24, *ibid.*, M. L., took the extract; 25, *ibid.*, M. L., took 2 grams; 26, *ibid.*, M. L., took 6 grams of the alcoholic extract; 27, *ibid.*, the author took 4 grams of the extract.

Mind.—First seemed very animated with a congested face, with great loquacity, inclining the head to the right and left,²¹.—Great agitation,²⁶.—Became almost violent, when he assumed a very sad, preoccupied air,²⁶.—Gesticulations,²³.—Spasmodic gestures,²⁰.—[470.] She rose up and spun around on one foot and began to walk,²².—Disposition to laugh,^{21 27}.—Constant laughter mingled with cries,²².—Whistling and singing,²¹.—Great loquacity,²⁶.—Constant murmuring of unintelligible words,²².—At first she seemed very much preoccupied,²².—Great sadness after the experiment,²¹.—Upon the subsidence of temporary excitement, the party experiences all those soothing sensations of ease and comfort, with that pleasing languor stated to constitute the potent charm that renders it in such universal request. If the inhaling process is carried beyond this stage, inebriation shortly supervenes,²⁰.—[480.] The action was that of a powerful narcotic. He felt all the symptoms of intoxication,¹⁹.—I seemed to lose consciousness of the existence of my limbs, a sensation compared to that when under the influence of chloroform, without complete loss of consciousness,²¹.—She went into a comatose state, which lasted four hours,²².

Head.—Vertigo was the first symptom,²³.—My head seemed to describe a circular movement, which propagated itself to the whole body, so that I fell to the ground,²¹.—Whirling in the head,²⁶.—Head heavy,²⁷.—Great heaviness of the head,²⁷.—Heaviness of the head, and headache after the

experiment,²⁶.—Sensation of dulness in the head like pressure,²⁷.—[490.] Tension in the head,²³.—Pains on the top of the head,²⁷.—Compression of the temples.²⁷.

Eye.—Eyes injected,^{22 25}.—Eyes injected and very brilliant,²⁷.—Heat and prickling in the external angles of the eyes,²⁷.—Suffused eyes,²⁰.—Pupils dilated,²³.—Pupils greatly dilated,²¹.—Pupils dilated, sensitive to light,²⁷.—[500.] On attempting to write, I found that the characters made with the pen were exceedingly fine,²⁷.—Sense of a flame playing in front of the eyes,²⁷.

Ear.—Loud singing in the ears,²⁷.

Face.—Became very pale, and fell down prostrated,²².—Flushed face,^{20 26}.—Stupid expression,²⁶.—Grimaces, as in chorea,²¹.—Efforts to laugh,²¹.—Contractions of the muscles of the face,²⁶.—Spasmodic contraction of the jaws.²⁷.

Mouth.—[510.] Mouth dry,²².—Mouth and throat dry,²⁶.

Throat.—Dryness of the pharynx,²⁷.—Swallowing became difficult on account of absence of saliva; it was impossible to eat,²¹.

Stomach.—Ate with unusual avidity, in fact, like a glutton; after the meal she had an appearance of astonishment, and looked at persons about her with a strange expression,²².—Nausea,²⁷.—At last nausea and profuse vomiting,²⁶.—Heaviness in the epigastrium,²⁷.

Urinary Organs.—Frequent efforts to urinate,²⁷.—Difficult, profuse micturition,²⁷.

Respiratory Organs.—[520.] As the too frequent employment of this plant must induce considerable bronchial irritation, with repeated attacks of pulmonary congestion and inflammation, emaciation as a necessary sequence gradually ensues, while a premature decrepitude of frame, conjoined with serious organic affections of the lungs, insidiously steals onward, and under the mask of phthisis finally terminates the existence of the victim,²⁰.—Violent paroxysms of coughing,²⁰.—Respiration rapid,^{23 26 27}.—Respiration very difficult,²².—I breathed with great force, with a sensation of heat,²¹.—Dyspnoea,²⁶.

Heart and Pulse.—Palpitation,^{21 27}.—Pulse rapid,²¹.—The pulse became very rapid and small,²².—Pulse very rapid and irregular,²⁷.—[530.] Pulse 75 (before the experiment); rose to 140, and became very irregular,²⁶.—Pulse 80 (before the experiment); rose to 140, and then varied from 130 to 140 for some time,²⁷.—Pulse 120,²⁵.—Pulse 100,²⁴.—Pulse small and irregular,²¹.

Neck and Back.—Beating in the nape of the neck,²⁷.—Pains at the base of the cerebral column, extending along the sciatic nerve, and in the hip-joint,²⁷.

Extremities.—Contractions of the limbs, as in chorea,²¹.—Stiffness of the limbs,²².—Heaviness of the limbs,²⁷.

Generalities.—[540.] When walking, seemed affected with chorea,²³.—General stiffness,²⁷.—Tendency to immobility,²⁷.—Great feebleness after the experiment,^{21 26 27}.—Great fatigue,²⁷.—Great lassitude,²⁷.—After the experiment great feebleness and desire to sleep,²⁵.—Sensation of indolence in the whole body,²⁷.—Frequent remissions, during which I said the attack had passed off, but I had no sooner said it than the attack returned anew,²¹.

Skin.—Vague sensation of tingling, like a beginning of anæsthesia of the skin (after half an hour),²¹.

Fever.—[550.] Extremities cold,^{26 27}.—Sensation of great heat,²⁵.—Heat of the skin,²⁷.—Heat of the head,²¹.

CANTHARIS.

Authorities. **113**, J. M. Fontanelle (Rev. Med.), *Lancet*, vol. ix, 1826, p. 233, a man, aged twenty years, took $\frac{1}{2}$ ounce; **114** (*Midland Reporter*, No. 11), *Bost. Med. and Surg. Journ.*, vol. v, 1831, p. 75, two young men took some lytta in raspberry brandy; **115**, W. Miller, *Lancet*, 1834-5 (2), p. 114, a woman, aged twenty-five years, swallowed some blistering plaster; **116**, *Med. Gaz.*, March 26, 1836, three negroes took some tincture; **117**, G. Smith, *Lancet*, 1840 (1), p. 133, a woman, aged sixty years, took a piece of blister plaster about the size of a walnut; **118**, *Brit. Journ. of Hom.*, vol. iv, 1846, F. T., aged seventeen years, was engaged all day in making "Emplastrum Cantharidis;" **119**, Dr. C. H. Hildreth, *Bost. Med. and Surg. Journ.*, vol. lii, 1855, p. 80, a man took a quantity of powdered Canth. in gin; **120**, W. R. Spence Jeffries, *Brit. Med. Journ.*, 1876 (1), p. 190, a lunatic took 3 fluid ounces of tincture; **121**, J. M. Schley, M.D., *Hahn. Month.*, 1878, p. 641, Mr. J., aged twenty years, took 2 drachms made into a fly-blister, at 5.30 p.m., during treatment Camph., Can. sat., Ars. and Ipecac. were given; **122**, M. Rosolino Braga, *Med. de Rio de Janeiro* (*Lond. Med. Rec.*, 1879, p. 80), M. C., aged twenty-three years, drank Canth. in wine.

Head.—Headache and dull heavy feeling around eyes (second day),¹²¹.—Shooting darting pain in right temple and in right eye (third day),¹²¹.

Eye.—Great dimness of sight, attended with smarting and burning round the eyelids, and round the balls of the eyes; constant lachrymation; the eyes turned towards the nose; twitching of the eyelids; he could not close his eyes without great pain, from smarting of the lids chiefly; there was considerable redness, and an apparent distress from the inflammation of both eyes. Some drops of the strong Camphor tincture were given him. The next morning everything appeared yellow. The nose was also considerably affected; some swelling with redness and heat, within as well as without, with the appearance of suffering from severe coryza,¹¹⁷.

Face.—Face flushed (second day),¹²¹.

Mouth.—Tongue coated white down centre (third day),¹²¹.

Stomach, Abdomen, and Urinary Organs.—Poor appetite (third day),¹²¹.—Great thirst, and throat very dry (second day),¹²¹.—Nausea after eating (fifth day),¹²¹.—[1660.] About 11 p.m. (after six hours) commenced to vomit, which, however, produced little pain, as the contents of the stomach came up easily. At 2 p.m. the greatest pain was produced by incessant vomiting and nausea. His retching was painful to look at, for after the most violent efforts he would bring up at most some of the administered medicine or a little mucus, but no bile at any time,¹²¹.—In an hour or two, vomiting and strangury commenced; the urine discharged being scanty in quantity, and contained blood. On the third day, she was attacked with severe pain in the region of the left kidney, accompanied by tenderness on pressure, and sympathetic fever,¹¹⁷.—Vomiting, with severe pain in the lower part of the abdomen, accompanied with bearing down, and most intolerable inclination to micturition, with heat and smarting so acute as to cause her to scream; also severe tenesmus, without evacuation of the bowels,¹¹⁵.—Gnawing painful feeling over region of stomach, extend-

ing into back between shoulders (second day),¹²¹.—Violent pain in the stomach, bowels, kidneys, and bladder; a constant desire to make water; and a burning heat in the throat,¹¹⁴.—Soon complained of lancinating pains of the stomach, burning of the throat, and great nausea. In two hours, violent retching succeeded, and the vomited matters were streaked with blood; they consisted, however, chiefly of frothy mucus. Next morning the pains continued, accompanied with cold clammy sweats, difficulty of swallowing, and in the evening, salivation. The mucus expectorated was of a pink color. Strangury supervened and continued for six days,¹¹⁶.—Flatulency, which when belched up gave temporary relief (first day),¹²¹.—Rumbling in the bowels (first day),¹²¹.—Severe pain in the lower part of the abdomen, thence extending into the lumbar region, but most intense just above the pubis. Some nausea, but no pain in the stomach,¹¹⁹.—About midnight he was seized with strong desire to urinate. In spite of all his efforts he could pass only a few drops of scalding urine, attended with severe pain throughout the length of the urethra, especially at the meatus, where he had a sensation like that of the pricking of pins. These symptoms became worse, and they were attended with priapism and severe pain in the genito-urinary organs, as well as in the lumbar region, and with intense thirst. At 9 A.M., he was much agitated, crying out and very restless. The eyes were injected and lustrous, the pupils dilated, and the countenance animated. The pulse was small and frequent. There was nausea with intense thirst. There was the most acute pain in the urethra, rendered much worse when with great difficulty some drops of urine were expelled. The desire to micturate was incessant, and an acute state of nervous erethism was produced. Only a very small quantity of urine could be discharged; and this was thick and bloody. The abdomen was retracted and sensitive to pressure, especially in the hypogastric region, where the slightest touch produced acute pain. Pain was also felt in the lumbar region, owing to the kidneys being affected, and this pain extended downwards to the perineum. The catheter brought away a small quantity of thick bloody urine, containing albumen in marked proportion,¹²².—[1670.] He went to dinner at 6 P.M. (after half an hour), but had little or no appetite, and about 8.30 went to his room suffering much pain in his abdomen and in the region of the bladder. The first and most prominent symptom was an excruciating burning before passing water, which was increased as the water left the bladder. About 9 he commenced to have the most excruciating pain in his bladder, with the continual desire to pass his water, which could only be pressed out in drops, but often bloody, and sometimes small clots would pass through the urethra, producing so much agony that he came near fainting on several occasions. About the same time his bowels moved several times, the passage being loose and without pain, except as the last faeces passed from the rectum, when he would experience some pain and straining, which soon extended to the bladder, bringing on the most painful tenesmus, which was but little relieved when one or two drops of bloody urine passed. At 2 A.M. he complained mostly of a tearing-boring pain immediately over the region of the right kidney; it was painful for him to lie in any position, but when his back was bent in, he felt more comfortable. At times he said the pain was most acute, and he would groan fearfully under the agony; this would last for several moments, when a short period of comparative ease would ensue, only to be succeeded by the old pain. This acute pain did not remain entirely localized to the region of the kidney, but followed the direction of the

ureters. The desire to urinate was somewhat better, still every ten or fifteen minutes he would seize the chamber, and under the greatest agony pass sometimes one-half ounce of urine without any appreciable appearance of blood, when probably the next time he would pass urine the first drop seemed to be almost pure blood. It was as the last drops passed the sphincter vesicæ that the pain amounted to torture, and though a young man of courage, his self-possession would forsake him, and his face betrayed what his sufferings were,¹²¹.—Burning feeling in and near orifice of urethra when passing water, and occasionally also when perfectly quiet; in the morning noticed the parts were slightly glued together (fourth day),¹²¹.—The amount of urine passed this morning was four ounces; its color when held up to the light was a reddish brown, showing the presence of a small amount of blood. Neutral on test. On adding N.H. ac. , also when heated, albumen was precipitated in abundance, amounting perhaps to $\frac{1}{4}$ per cent. The presence of albumen was found to be caused by the large quantity of blood in the urine. Under the microscope a very large number of blood-corpuscles, occasionally pus-corpuscles, epithelia of bladder, and spheroidal cells from the tubuli uriniferi and pelvis of kidney were to be found. The epithelia from the bladder were more numerous than those from the kidney. There was some mucus, with which the blood-corpuscles seemed to be intimately mixed. There were no crystals, no casts. The deposit at the bottom of the vessel, after standing some little time, was considerable (first day). Urine pale yellow. Reaction alkaline. Albumen present, but in less quantity. Under the microscope there was a diminution of the blood-corpuscles, and epithelia from the bladder. The cells from the pelvis and kidney had diminished some in number (third day). Urine light yellow, much deposit, reaction alkaline. Albumen much decreased. Microscope shows a marked diminution of blood-corpuscles, a diminished number of cells from kidney and epithelia of bladder. On the other hand there was much mucus, intermixed with large quantities of urates, and some crystals of carbonate of ammonia (fifth day). Urine alkaline; no albumen; no blood corpuscles. Increase of mucus, urates, and epithelia of bladder, and an exceptional cell from kidney (eighth day). Urine alkaline, much sediment. Large quantities of mucus, with epithelia of bladder, and an exceptional cell from pelvis of kidney (thirteenth day). Urine varied frequently in appearance now, sometimes being quite clear; this was more marked toward morning, whereas towards noon it would be quite cloudy. Color of urine passed in office decidedly more natural. Alkaline, large quantities of mucus, urates, epithelia from bladder, and crystals of carbonate of ammonia (nineteenth day),¹²¹.

Heart and Pulse.—Pulse accelerated, 92; skin hot (after nine days),¹²¹.

Generalities.—Nervous, constantly threw himself about in bed, and could not sleep (second day),¹²¹.—After two hours and a half she was suffering much from burning pain and constriction in the throat; her eyeballs were prominent; her lips and mouth were parched and bleached (blistered). She was salivating, retching, and vomiting a glairy tenacious mucus; her tongue was also bleached along the sides and tip; but was blackish brown in the centre, and much swollen. The breathing was very irregular and imperfect, sometimes quick, sometimes slow, and at great intervals. The pulse at the wrist was full and bounding; the vessels of the head and neck were much congested. The poor creature appeared to be suffering great agony, as was indicated by her expression of countenance, and the throw-

ing about of her arms and body in her endeavors to obtain relief. Vomiting was free, and the patient complained much of pain in the gullet, and great difficulty in swallowing. Seven hours after the poisoning she complained of pain over the bladder, uterus, and kidneys, especially severe over the hypogastrium. She passed a restless night; she frequently tried to urinate, but ineffectually, only passing a little blood instead of urine. The bowels acted slightly, the motion being black and tarry-looking. The pulse was now small and compressible; she died in twenty-one hours and a half after the poisoning. The post-mortem showed in the posterior and upper surface of the stomach, three inches from the pyloric end, a perforation sufficiently large for a small hen's egg to pass through; the edges of the perforation were ragged, congested, and blackened, and the mucous membrane for two inches on each side was congested and blackened, and the mucous surface of the stomach and lower end of the gullet generally in a blackened and softened state, and coated with a black grumous matter,¹²⁰. —Almost immediately seized with violent heat of the urine, heat in the throat, and pain in the head. These symptoms increased, and were followed by excessive sickness. Eight hours after the accident he passed a quantity of blood from the urethra, with excessive pain,¹¹³.

Skin.—Brownish-yellowish appearance of skin (fifth day),¹²¹.

CAPSICUM.

Authority. 12, Dr. Högyes, Archiv. für Exper. Path. und Pharm., 9, 122, five hours after dinner I took in a capsule 0.1 cc.

In about ten minutes I experienced eructations, which at first were odorless, afterwards had a taste of pepper. At the same time there was a slight but not disagreeable sensation of warmth in the stomach, which extended through the œsophagus to the fauces, followed by frequent eructations, sensation of warmth amounting to slight heartburn, after which the eructations became burning. Later there were rumbling and flatus in the bowels. After an hour the symptoms disappeared, the sensation of warmth in the epigastric region ceased. The next morning I had a rather soft stool which glimmered slightly, followed for a short time by burning warmth in the anus. An assistant took 0.2 cc. He experienced the same sensation of warmth in the epigastrium, finally becoming a violent burning, followed by inclination to vomit, and general sick feeling. After half an hour, violent rumbling in the bowels, with inclination to stool, relieved by emission of flatus,¹².

CARBO VEGETABILIS.

Authorities. 5, G. Nelson Smith, M.D., Am. Journ. of Hom. Mat. Med., vol. v, New Ser., 1876, p. 183, Mrs. Dr. J. L. C. began with eating bits of charcoal for "heartburn," and to "sweeten the stomach," but latterly she had been in the habit of triturating it to an impalpable powder, and taking about one half of a teaspoonful two or three times a day; (6 to 25, Conrad Wesselschæft, M.D., Trans. Am. Inst. of Hom., 1877, p. 119); 6, E. E. Holman took eight doses of 3d trit. in one day; 7, L. W. Todd took one dose of 3d trit.; 8, Mrs. F. H. Stanford took repeated grain doses of 1st trit. for six days; 9, same, took repeated doses of 2d trit. for nineteen days; 10, R. R. Trotter took repeated doses of 1st trit. for twelve days;

11, J. A. Marshall took repeated doses of 1st trit. for five days, then after an interval of four days for five days more; 12, Mrs. H. H. Cobb took repeated doses of 1st trit.; 13, S. J. Aldrich, æt. forty years, took 2 powders (first day); 3 powders (second day); 4 powders (third day); 13*a*, same, took 5 powders at intervals; 14, M. Mason took repeated doses of 1st and 2d trit. for ten days; 15, Mrs. F. J. M. Whitcomb took 4 powders of 1st trit. in one day; 15*a*, same, took 3d trit. repeated doses; 15*b*, same, took 1st trit. 4 grains twice; 16, S. M. W., a young man, took 3d trit., repeated doses, for five days; 17, W. B. W. took 3d trit. without effect, afterwards took 4 grains 1st trit., morning and noon; 18, Mrs. M. D. Crane, æt. sixty-two years, had a cough caused by cold took several powders; 19, Miss M. M. took repeated doses for a week; 20, Mrs. L. G. B., æt. thirty-eight years, took repeated doses; 21, Mr. C. D. R. took 1 grain at 7 P.M. (first day); same at 7 and 11 A.M. (second day); 22, C. I. L., æt. twenty-two years, took repeated doses for three days; 23, Mrs. J. H. Marshall, æt. thirty-seven years, took repeated doses; 24, Mrs. F. H. took repeated doses; 25, Miss S. W., æt. thirty-one years, took repeated doses.

Mind.—Great anguish, especially in the evening,⁵.—Feel doleful (eighth day),¹¹.—Depressed (after 6 grains),^{13a}.—Very depressed (twenty-fourth day),⁹.—Hard work not to shed tears (twenty-third day),⁹.—Irritability,⁵.—Very irritable (third day),¹⁹.—Cross about trifles,²⁰.—Peculiar mental weakness and confusion,⁵.—[1190.] Ideas slow, confused; memory lost periodically.⁷.

Head.—Vertigo on slightest motion of head,⁵.—Slight headache (after 5th powder),^{13a}.—General headache,⁵ pronounced in the region of the brain (third day),¹³.—Terrible headache, similar to one described,⁷.—Pressure in the head (third day),²¹.—Oppressive headache above eyes, with nausea,².—Dull pain in frontal region (fifteen minutes after 6 grains),^{13a}.—Slight pain in the left temple (after third dose); pain in left temple much increased, and rapidly extending over the top and sides of the head, very excruciating in character; a continuous, dull, almost unbearable pain (after fourth and fifth dose),⁶.—(Crazy feeling in right side of head, and steady pain in right orbital region. Can't study, head feels so badly; a sort of tired-out sensation in front and top of brain), (eighth day),¹¹.—[1200.] Sticking pain through right parietal region, in the evening (ninth day),¹¹.—Violent itching of the scalp for many days,²⁰.

Eye.—In eyes itching, smarting, burning,⁵.—Twitching of eyelids,³.—Stiffness of eyelids, when moved (second day),²⁰.—Nearsighted,⁵.

Ear.—In ears ringing, humming, pressure,⁵.

Nose.—Sneezing (first day),⁵.—Fluent coryza (fifth day),¹⁰.—Coryza during the day (seventh day),¹⁰.—[1210.] Watery discharge from the nose (after seventh dose),⁶.—I had a slight chronic catarrh before taking medicine, which has aggravated all the symptoms (twelfth day),⁹.—Violent coryza,²⁵.

Face.—Face pale,⁵.—Face worn-looking,²¹.—Aching in superior maxillary bones,²⁰.—Drawing tearing in facial bones,⁵.—Twitching of upper lip,².—Dry, cracked, swollen lips (tenth day),¹¹.

Mouth.—Teeth, drawing and tearing pain; chronic looseness of the teeth; soreness of gums,⁵.—[1220.] Fissure of the tongue, with vesicles around the edges, that smart as though burned (tenth day),¹¹.—Tongue sore,⁵.—Canker sore on inside of lip (tenth day),¹⁰.—Alternate dryness of mouth, with salivation (sixteenth day),⁹.—Dryness of mouth, with thirst,

alternating with salivation (seventeenth day),⁹.—Secretion of viscid and thin watery saliva (sixteenth day),⁹.—Taste bitter,⁵.

Throat.—Throat slightly sore (second day),⁸.—Soreness in throat, with tickling (eighth day),⁹.—Pain in throat when swallowing,⁵.—[1230.] Raw feeling in posterior nares (thirteenth day),¹⁰.—Burning of fauces, with desire to cough (sixth day),⁸.—Difficult deglutition,⁵.

Stomach.—Chronic aversion to meat; very marked; appetite lost,⁵.—Thirst, alternating with slight salivation (seventh day),⁹.—Sour, bitter eructations (after fifth dose),⁶.—Heartburn,⁵.—Constant nausea, with trembling feeling,⁵.—Felt sick in a few minutes, with eructations of wind (seventeenth day),⁹.—Bloating of stomach (fifth day),⁸.—[1240.] The simplest food caused distress,⁵.—Feeling of goneness in stomach (after fourth dose),⁶.—Tenderness of the stomach and a faint feeling,²⁰.—Hard sensation in the stomach, as though something were there that ought not to be; relieved by sour, bitter eructations (after fifth dose),⁶.—Pressive pain in epigastric region (seventeenth day),⁹.

Abdomen.—Pain in hypochondria, as if from a bruise,⁵.—Pain in the region of the spleen, followed by a dull heavy ache,¹⁵.—Abdomen bloated, in the evening (fourth day),⁸.—Symptoms of flatulency (after 3d powder),^{12a}.—Fetid-smelling wind per rectum (first day),⁸; (eighth day),⁹.—[1250.] Passage of wind with a loose stool (fourth day),⁹.—Feeling of tight band around the waist; passes off at 8 o'clock, with discharge of very offensive flatus (second day),¹¹.—Pressure and cramp in lower abdomen,⁵.

Rectum and Anus.—Piles protruding one-half inch and very sore; they troubled him about three days (after five days); never had them before,¹⁶.—Painful bearing down in rectum and lúbia (third day),²⁰.—Constriction of the rectum,²⁰.—Pain in rectum during entire evening (second day),²⁰.—Dragging pain in rectum (second day),²⁰.—Severe tenesmus and pain,²¹.

Stool.—Diarrhæic stool, ending in a gushing watery evacuation (third day),⁸.—[1260.] Loose stools, with tenesmus (second day),⁸.—Constipation, but with stool soft,⁵.—Constipated (seventeenth day),⁹; (fourth day),¹⁰; (first day),¹¹.—Bowels constipated, with urgent desire to urinate, passing large quantities of pale urine (fifth day),¹¹.

Urinary Organs.—Desire to urinate nearly all the time (seventh day),⁸.—Desire to urinate, with passage of a large quantity of pale urine (fourth day),¹¹.—Urine less and not so often, as is my habit,¹⁸.—Urine diminished; frequent urging to urinate,⁵.—Urine light, nearly colorless; urging to micturate (ninth day),⁹.—Much sediment in urine (third day),²⁰.

Sexual Organs.—[1270.] Os to touch is unusually open (twenty-fourth day),⁹.—Contraction of genital organs (third day),¹³.—Wretched nervous feeling originating in uterine region and culminating in the inner thighs; lasting through the evening (seventh day),¹¹.—Feeling of weight in uterus and right ovary, and nervous, fidgety feeling extending down right thigh (eighth day); heaviness in uterus (ninth day),¹⁴.—Feeling as though menses would appear (fifth day),¹¹.—Character of leucorrhœa changed from an acrid greenish yellowish-white to the color of albumen streaked with milk (second day),⁹.—Menses appeared, preceded by several quite sharp pains through uterus (seventh day),¹¹.—Very profuse flowing (eighth and ninth days),¹⁹.—Menses increased in quantity, thin and pale,⁹.—Menses delayed or were very slight, three or four days, then unusual amount of pain and profuse flow. Menses appeared without premonitory state of discomfort, lasted less time than usual (after three weeks),¹².—

[1280.] Clots in menstrual flow, which is thicker than usual (first day),⁸.—No membrane in menstrual flow (third day),⁸.

Respiratory Organs.—Can bear no pressure on thyroid gland (fifth day),⁸.—Hacking cough raising a little white tasteless mucus from throat (second day),⁸.—(Cough quite improved; have less collection of mucus),¹⁸.—Respiration increased, 32 on lying down (second day),²¹.—Stopping of breath,⁵.

Chest.—Oppression in lungs and heart,⁵.—Lungs and throat feel raw, as if they had been scraped (after seventh dose).—A hot constricted feeling in the chest, causing dyspnoea and a dry short cough; very much troubled for breath; passed off in about an hour (fourteenth day),¹¹.—[1290.] Sticking pain in chest (third day),⁹.

Heart and Pulse.—Palpitation,⁵.—Palpitation marked (fifth day),¹¹.—Heart's action disturbed (fifth day),¹¹.—Throbbing of heart relieved for a few minutes, by taking a deep breath (sixth day),⁹.—Could feel distinctly the pulsation of the heart (third day),²².—Heart seemed to stop beating at night (first day),²¹.—Decrease of pulse, with tendency to intermit,²⁰.

Neck and Back.—Painful stiffness from neck down entire spinal column,⁵.—Posterior cervical muscles painful to touch (fifteenth day),¹⁰.—[1300.] Pressure between shoulderblades (seventh and ninth days),⁹.—Pressure between scapulae on rising (eighth day),⁹.—Pain along the spine (fifteenth day),¹⁰.—Sharp stitch in lumbar region (after two hours and ten minutes),¹⁴.—Pressure on sacral region continues, though slight (ninth day),⁹.

Extremities.—Rheumatic pains and lameness: worse in arms and thighs,⁵.

Superior Extremities.—A continuous, rather sharp pain in right shoulder, worse on motion; two hours and a half later can scarcely move right shoulder, because of a knifelike pain from shoulder through to chest (third day),¹⁴.—Feeling as if the wrists were too short, numb, and "go to sleep all the time,"⁵.

Inferior Extremities.—Tired around hips and sacrum (eighth day),⁹.—Continuous tingling in Scarpa's triangle of left leg in place of old abscess (tenth day),⁸.—[1310.] Lame feeling in region of sciatic notch (deep), while standing and walking, more on right side than left; lameness extends across sacrum (sixth day),⁹.—Knees stiff and "going to sleep all the time,"⁵.—Creeping pains in knees (sixth day),¹⁴.—Legs tired, especially the calves (fourth day),⁸.—Aching of tibia about its middle,²⁰.—Feet grew tender and were swollen,¹⁷.—Numbness of feet,⁵.—Pains in the great toe (third day),¹¹.

Generalities.—Restlessness,⁵.—Very restless,²¹.—[1320.] Anguish in all the vital organs,⁵.—General lassitude (after fourth dose),⁶.—General weak and faint condition of body, especially in the morning, preventing rising till late,⁵.

Skin.—Alarming numbness in all the external parts,⁵.—Formication all over,⁵.—Skin burning,⁵.

Sleep.—Drowsy (second day),²¹.—Very drowsy in the day; falling asleep very late at night; frequent starting in sleep, with strange fancies, etc.,⁵.—Sleepy (tenth day),¹⁴.—Sleepy at 2.30 p.m. (sixth day),¹⁴.—[1330.] Sleeplessness (eighth and ninth days),¹⁰.—Half awake all night, and awake in the morning feeling tired, cross, sleepy, my mouth having a peculiar feeling, as though painted or covered over with something, and tasting, as near as I can describe, as one's mouth does when having the measles

(first day),⁶.—Sleep full of dreams of hard work,²⁰.—Horrid dreams (fifth day),¹¹.

Fever.—Chilliness, with flashes of heat,⁵.—Chilly feeling (fifth day),¹⁴.—Very cold (first day); cold, obliged to sit beside the fire (second night),²².—Very cold feet,^{15b 17}.—Feet cold in a warm room (sixth day),⁸.—Feet feel like ice and feel damp (ninth day),¹⁴.—[1340.] Feet feel as though dipped in cold water (eighth day),¹⁴.—Hot flushed face (third day),²².—Burning heat in left foot (sixth day),¹⁴.—Feet quite moist,¹².

CARBOLIC ACID.

Authorities. 48, G. W. Harrison, *Lancet*, 1868 (2), p. 133, a woman, æt. forty-three years, took a quantity of crude; 49, Dr. Jas. S. Houston, *Phil. Med. and Surg. Rep.*, vol. xxii, 1870, p. 32, a man, æt. thirty-two years, swallowed over an ounce, death; 50, W. E. Taylor, M.D., *Phil. Med. Times*, May, 1872, p. 284, T. R., æt. twenty-three years, took about an ounce; 51, Dr. Cowling, *Am. Pract.*, vol. vii, 1873, p. 315, a woman, æt. sixty years, took a tablespoonful; 52, F. Warren, *New Remedies*, vol. iv, 1875, p. 367, a man drank a solution; 53, Dr. Davidson, *Med. Times and Gaz.*, 1875 (2), p. 597, a man, æt. forty-seven years, swallowed 4 ounces crude; 54, Dr. Woodman, *Med. Times and Gaz.*, 1875 (2), p. 421, a child, æt. seven years, drank some crude; 55, J. E. Shaw, *Lancet*, 1875 (2), p. 451, a woman, æt. thirty-seven years, took 50 grams in linseed oil (1 to 10); 56, M. Wiart (*L'Aimie Med.*, October, 1876), *N. Y. Med. Journ.*, vol. xxv, 1877, p. 211, *Mdlle. X.*, æt. forty-three years, swallowed 10 grams of a strong solution; 57, C. M. Worthington, M.D., *N. O. Med. and Surg. Journ.*, 1876, p. 168, a child, æt. two years, drank some; 58, G. William Semple, M.D., *Virginia Med. Month.*, May, 1877, p. 138, a lady, æt. fifty years, swallowed two teaspoonfuls; 59, A. H. Z., 2, 1877 (*Hom. World*, vol. xii, 1877, p. 467), a lady took 10 grams of concentrated solution; 60, C. A. Norton, M.D., *Pub. Mass. Hom. Soc.*, vol. iv, p. 285, accidental poisoning; 61, Dr. C. P. Putnam, *Bost. Med. and Surg. Journ.*, vol. xcix, 1878, p. 406, three-fourths of a solution, containing two teaspoonfuls of liquid crystals, were injected into the rectum of a boy æt. four years; 62, S. H. Dessau, M.D., *Med. Record*, April 13th, 1878, p. 289, a child, æt. two years and a half, swallowed about a tablespoonful; 63, Dr. Oberst (*Berlin, Klin. Woch.*), *Lond. Med. Rec.*, 1878, p. 219, a man, æt. thirty-two years, swallowed about 5½ ounces of five per cent. watery solution; 64, Dr. Rheinstädler, *Deutsche Med. Woch.*, April, 13th (*Lond. Med. Rec.*, 1878, p. 219), a woman, æt. thirty-one years, after removal of a large fibrous tumor from the uterus, injected daily a one per cent. solution into the wound; 65, W. H. Packer, M.D., *Lancet*, 1878 (2), p. 511, a woman, æt. twenty-nine years, swallowed some; 66, T. L. Wright, M.D., *Cincin. Lancet and Obs.*, 1878, N. S., vol. i, p. 68, poisoning of a man, æt. fifty years, from the injection of Carbolic acid into a hemorrhoidal tumor.

While sitting in my room writing I was annoyed by flies. I had, just before me, a bottle of Calvert's *Carbolic acid* in crystals. The idea suggested itself to prepare a strong solution, and place it on the desk before me, thinking the odor would banish the flies. The smell of the acid was disagreeable to me at first, but it was successful in ridding the room of flies. I continued to write for about half an hour, when I began to feel faint. More especially did I feel this faintness at the stomach. My head was not

affected at first, but in about ten minutes after the faintness came on, my head began to feel as if it was inflated like a ball. The greatest pressure seemed to be in the temples. It seemed to me that if I could turn my eyes sideways, I should see my temples sticking out. (Prominent symptom.) There was no pain at first in the head, but this peculiar pressure from the inside, which resembled pain, was not exactly unpleasant, because it was so strangely novel. I would often stop writing and shake my head, which would seem to increase the pressure, merely for the gratification of the peculiar feeling it afforded me. In about an hour from the time I prepared the acid, the faintness had become so general that I was obliged to stop writing. I attempted to rise, when I found my legs so weak that I could with difficulty stand. The moment I attempted to rise, the sensation in my head was so peculiar that I could not refrain from laughing. I soon felt serious, as the faintness obliged me to sit down. My mind, which before I mixed the acid, had been rather sluggish, now seemed to be teeming with delightful ideas, which came much faster than I could give them shape in words. I attempted to use my pen again, but found my arms so weak that I could not trace a line. I had not, as yet, thought what produced my strange feelings, and I attempted to analyze them. I became alarmed. I got up, and with some difficulty I went to another room. The moment I stood on my feet I seemed to lose all feeling, except in the head. That seemed to be increased to ten times its natural size, and the best description I can give of my difficult walk to my friend's room is, that I lost all realization that I possessed a body, and that my head seemed to float in the air. Arriving at the room, I found no one there; I lay down on the lounge and soon began to feel better. The strange symptoms abated in the order in which they came on; first the weakness of the stomach grew less, then the head seemed to grow smaller, and my active brain became more calm and quiet. I remained lying about twenty minutes, then got up and walked to my room again. I still felt weak, and had a dull aching distress in the stomach, my head still feeling somewhat giddy. The moment I opened the door of my room, the odor of the acid forced itself upon me as the cause of my trouble; I at once threw the solution out of the window, opened the doors and windows, and aired the room. I was now called to tea. As soon as I entered the dining-room it seemed as if I could smell everything on the table, even the bread and butter. The moment my eye rested on a thing I could smell it, even at the farther end of the table. This sense of smell seemed to satisfy my appetite, and I ate but a small piece of bread, excused myself, and retired to my room. I soon had a desire to go to the water-closet. The moment I entered it, it seemed as if I should be overpowered with the stench. I could not remain, but went back to my room. The water-closet was no more foul than ordinary water-closets, but it was half an hour before I ceased to smell that peculiar sickening odor. I seemed rather inclined to smile at my strange feelings. I was in a happy frame of mind, thinking only of pleasant things. I lay down on the bed, and had it not been for the distress in my stomach, should have been quite happy. This distress was worse when lying on either side, but was easier when lying upon the back, with my legs drawn up. In this position I fell asleep, and remained so till some one aroused me. I found that I had slept about two hours and a half. I had had no dreams, but should judge that my sleep had been very uneasy, as my bed was very much disarranged. It seemed as if I had been all over it; in fact, I was lying across it when I awoke. The distress in my stomach had now given way to a deathly

faintness, and my head felt bruised and sore. I at once began to undress. While doing so I was obliged several times to stop and rest. I thought I should faint before I could get into bed. I was not alarmed, but seemed rather pleased with my peculiar feelings. I attempted to whistle and sing, but had not the strength. Soon after getting into bed I fell asleep in the same position as before, on my back, with my legs drawn up. I did not awake till 6 o'clock next morning, but what was strange with me, I was wide awake in an instant. There was no rubbing the eyes nor stretching, but from sound sleep I passed in an instant to absolute wakefulness. I did not feel as weak as the night before, but had all the symptoms of a bad diarrhoea, with a disagreeable, hot, burning sensation in the rectum. With that I felt as if I had taken a large dose of *Opium*. Particularly did I feel this *Opium* symptom in my head. But what was my disgust, when I arose from my bed, to find that I had passed several small stools, involuntarily, during the night. I went to the water-closet, and although I had all the symptoms of a diarrhoea, had no movement of the bowels. I went to my room and took one dose of *Arsen. alb.* 3d, and then went to breakfast. Had no desire for food. Drank part of a cup of tea (usually drink coffee), and ate a small piece of dry toast. Food seemed to cause nausea. The *Opium* symptom in the head still continued; was worse when walking; going up or down stairs made me giddy. Cold water caused nausea. Could not wipe my face with a towel, it was so sensitive to touch. It hurt me to comb or brush my hair. I now went out to visit my patients, but the jarring motion of the carriage increased all my bad feelings, so that I was obliged to return to the house. I now began to feel a bruised or sore feeling through the small of the back and bowels. By noon this feeling had gone into the hips, which ached badly. The burning feeling in the rectum was very troublesome, so much so that I took a cold-water injection. My bowels seemed filled with flatulence. Did not go to dinner, had no desire for food, the thought of it was unpleasant. About two o'clock I had a stool, not large, but passed with considerable flatulence. The stool appeared as if composed of thick glue, and mixed with currant seeds, though I had eaten nothing of the kind. It was passed in thin strips, very much like tape. This same peculiarity I noticed in the involuntary stool I passed the night before. Towards night the pain in my hips had passed into the right leg, from the hip to the knee. I did not eat any supper, but retired early, and passed rather a restless night. The pains in my right leg prevented me from sleeping. In the morning the pain had gone from the knee to the foot, and during the day passed off altogether. My bowels, however, continued to be sore, and my head was still troubled with the *Opium* symptom. All the strange feelings gradually grew less, and in three days were nearly gone. Previous to my exposing myself to the fumes of the acid, my health had been good, and during the unpleasantness I took no remedy except the *Arsen.* I have twice since experienced similar symptoms when exposed to Carbolic acid vapor,⁶⁰—[610.] Insensible, retching, the breathing stertorous, the pupils much contracted, and the pulse intermittent; strong smell of acid from the stomach; the mouth, tongue, and fauces presented a white, corroded appearance,⁶¹—Insensible; face quite livid, bathed in profuse clammy perspiration; pupils contracted and not responding to light; mouth open, filled with frothy mucus; respiration stertorous; pulse imperceptible; heart-sounds scarcely audible (in five minutes),⁶²—Totally insensible; pulseless; pupils dilated; face pallid and pinched; respiration of a gasping character; involuntary discharge of

urine (in two minutes),⁵⁰.—As soon as the mixture was swallowed, it came foaming out of the mouth, and the patient asked, "What is this you have given me? it burns;" unconscious; pupils contracted and insensible; breathing about 50 per minute; pulse 150, rather small, feeble, and intermittent; surface bathed in clammy perspiration; the mouth and throat, as far as could be seen, were whitened by the action of the Carbolic acid; the pharynx and larynx were filled with mucus, giving rise to tracheal râles (after ten minutes); countenance indicating a cyanosed condition; superficial veins of head distended,⁵¹.—Immediately became insensible, falling down suddenly as if in a fit; on his recovery he said he remembered nothing whatever of tasting the liquid. An attack of acute gastritis followed. The urine passed the day after the accident was almost black, but was free from turbidity, and no trace of Carbolic acid, blood, or albumen could be detected in it,⁵².—In about twenty minutes she was found unconscious, collapsed, and blanched. The breathing was stertorous; the pupils were contracted; the pulse was hardly perceptible, not rapid. In about three hours the surface of the body was cold, there were convulsive twitchings of the limbs, and she vomited some blood and cily matter. The next day she continued to vomit a greenish watery matter. The bowels had acted several times, the motions being at first black, afterwards dark brown, and without odor of Carbolic acid. The urine is of a smoky color and aromatic odor. The addition of strong Sulphuric acid to it causes a purple color, changing rapidly to blue; no odor of Carbolic acid is given off. No albumen present. She complains of great burning pain in throat and epigastrium. There is tenderness on pressure over the stomach and cecum. Fauces reddened and covered with mucous exudation. There is a dark-brown stain on the skin of the upper lip, and running down the left side of the mouth and chin. Pulse rapid; temperature in evening 102°,⁵³.—Unconsciousness was rapidly becoming absolute, the face dusky, the skin was moist and pupils dilated, while the pulse was rapid, irregular, and scarcely perceptible; the breathing remained regular, although the relaxation of the soft palate rendered it noisy. In about an hour after the poisoning coma was complete, the face perfectly livid, the pupils dilated, the skin secreting perspiration in the most extraordinarily profuse manner, the surface of the body warm, as also were the extremities, with the exception of the hands, the pulse at the wrist imperceptible, and the muscles of the soft palate and tongue so entirely relaxed that it was necessary to keep the latter organ extended with catch-forceps to prevent it from falling back upon the glottis. On recovery she was entirely ignorant of what had occurred, and did not know that any mistake had been made. She complained of no pain except in the tongue, but remained in partial prostration for some days, and suffered from an attack of gastric catarrh,⁵⁵.—Immediately after the child swallowed the acid, he began to run around the room crying; on being taken up he instantly became unconscious, turned livid in the face, his eyes staring, breathing slowly and noisily, and foaming at the mouth and nose. Soon after the larynx was full of râles. Face pale, cheeks livid, pupils dilated and not responding to light, and there was slight twitchings of the muscles of the extremities. The capillary circulation was very slow. There was a streak of excoriation upon the chin, where some of the acid had run. The next day the uvula was found whitened and shrivelled. He had passed in the morning about a pint of clear urine, of a dark olive-green color, without odor; and had been troubled in the night with a croupy cough,⁶².—Immediately became unconscious, breathing laboriously; face pale, and

covered with a cold clammy sweat, with convulsive twitching of the facial muscles, and trembling of the limbs; the jaws were firmly compressed, while the pulse was small, and almost imperceptible. He recovered in about three hours, but there remained some soreness and reddening of the mouth and gullet, with a burning pain at the epigastrium. The urine, which was passed voluntarily, showed traces of albumen, and assumed a dark-green color, which again disappeared in the course of the following day. Simultaneously all symptoms of cystitis disappeared, and the patient made a good recovery.⁵⁵—On the removal of the syringe the patient said something “became numb and commenced to jerk.” The respiration was 30 in the minute, and superficial; the pulse was 168 at first, but in the course of the next two hours it fell to 120.⁶¹—One evening it was observed that after the solution had been thus injected, little or none of it flowed away, and at the same instant the patient uttered an exclamation, and suddenly became unconscious, with tremor of limbs, pallor of skin, clammy sweat, and intermittent laborious respiration, imperceptible pulse, etc. The next day she wholly recovered from the above symptoms. There existed, however, for some days, an irritative vesical catarrh, caused doubtless by the rapid elimination of a considerable quantity of the poison. The urine, which for the first twenty-four hours, showed the usual dark-greenish color, now became acid and albuminous, depositing a thick sediment of pus.⁶¹—[620.] Great debility; violent burning sensation from the fauces down to and into the stomach; pulse full, slow, regular, and strong; semicomatose condition; she could only with difficulty be made to understand any question; she could scarcely move her limbs, and when raised they dropped like those of one dead drunk, as indeed she was.⁵⁸—Insensible (after a few seconds); skin pale, with cold sweat; features livid; breathing labored; mucous râles, almost to suffocation; pulse 110, small and hard; pupils partially dilated (after twenty-five minutes); convulsions in fifteen minutes after insensibility, that returned every few minutes.⁵⁷—Immediately slight convulsions set in, followed by unconsciousness, cold sweat, pulse hardly to be felt; the convulsions lasted for an hour, when consciousness returned. Breath smells of Carbolic acid. Lips, gums, pharynx coated with a white membrane. White membranes were ejected by the mouth. Other membranes were thrown off the next day. Stool and urine pass involuntarily; the latter gives the linen the color of red wine.⁵⁹—Almost immediately afterward she was seized with convulsions, and there was a complete loss of consciousness, cold perspiration, imperceptible pulse, strong odor of Carbolic acid in breath; lips, tongue, gums, and pharynx covered with a white slough. The convulsive attacks continued for an hour, but were not severe. Consciousness returned in an hour; there was great pain in the neck and stomach, and difficulty in swallowing even small quantities of milk; the mouth was filled with a thick saliva. There was vomiting, the vomitus being a white, creamy substance, smelling of Carbolic acid; involuntary fecal discharges, not at all abnormal in appearance; but the urine, which was also voided involuntarily, left a stain on the linen resembling that made by dark-red wine.⁵⁶—Face of a leaden hue, and bathed with cold sweat; eyes fixed, and the pupils slightly dilated; extremities cold and completely insensible; breathing stertorous; slight convulsions.⁵⁴—In five minutes in a state of collapse, pale, and cold, with clammy perspiration on the forehead. The radial pulse was about 112, and scarcely distinguishable; the conjunctiva was insensible to touch, and the pupils were dilated and immovable; respiratory movements almost imperceptible, about 56

per minute; froth exuded from the nostrils. The breath smelt strongly of Carbolic acid, and marks of erosion were seen on either side of the upper lip.⁶⁵—Chill, attended with great nervousness and distress, although profusely warm; unsteady, weak, and irregular pulse; great giddiness and impending convulsions. He recovered from this "chill," but continued exceedingly dizzy for three days longer,⁶⁶

CARBONEUM CHLORATUM.

Authority. **3**, J. Y. Simpson, M.D., *Pharm. Journ.*, vol. vii, 1848, p. 516.

When the vapor is inhaled it causes so great irritation of the throat, that few can persevere in breathing it for such a length of time as to induce anesthesia. I have latterly, however, seen it inhaled perseveringly until this state, with all its usual phenomena, followed; and without excitement of the pulse or subsequent headache. When I myself attempted to inhale the Chloride of hydrocarbon, it produced an extreme degree of acrid irritation in the throat, which did not disappear entirely for many hours afterwards.³

CARBONEUM OXYGENISATUM.

Authorities. **33** and **34**, S. Plympton, *Bost. Med. and Surg. Journ.*, vol. xix, 1838, p. 325. Goodwin, aged twenty years, and Denvir, aged twenty-six years, put an iron kettle containing charcoal into their sleeping-room; **35**, Dr. B. E. Cotting, *ibid.*, vol. liv, 1856, p. 142, F. J., aged twenty-three years, slept in a closed room with a coal fire; (36 to 41, from Dr. J. Ch. Herpin, *L'Acide Carbonique*, Paris, 1864); **36**, effects of a bath; **37**, M. Rotureau, effects of a bath; **38**, Dr. Sequin, *Annal. de Chem.*, vol. lxxxix, 1792, experimented on himself by inhaling the gas; **39**, Pilatre de Rozier, descended by a cord attached to the shoulders into the gas caused by the fermentation of beer; **40**, Attumonelli, breathed the air of a grotto laden with Carbonic acid gas; **41**, Herpen, general effects; (42 to 54, from Friedberg, *Die Vergiftung Durch Kohlendunst*, Berlin, 1866); **42**, case of poisoning; **43**, a family were poisoned by sleeping in a room with a coal fire; **44**, poisoning of a man; **45** to **54**, other cases; **55**, Dr. McD., *New York Journ. of Hom.*, vol. i, 1873, p. 566, effects on himself of sleeping in the room with a Franklin stove, the draft being shut off; **56**, effects on Mrs. McD.; **57**, Dr. Quinke, *Archiv. für Exper. Path. und Pharm.*, vol. vii, p. 101, the action of carbonated water.

Urinary Organs.—In a general way it produces a sensation of warmth and tension in the stomach, it excites the peristaltic action of the stomach and intestines, promotes the appetite and digestion, increases the secretions of the stomach, accelerates the respiration and pulse, and according to some authors, causes slowness of the pulse, and diminishes the temperature. The whole organism becomes freshened and energetic, and mental activity is increased. Large quantities cause vertigo and congestion of the brain. The secretion of urine is increased; carbonated waters are the best diuretics. The object of the present paper is to show the diuretic action of carbonated drinks by a series of observations. The subjects experimented on, healthy, with good and regular appetite; the hours for meals were fixed, and the food and drink were carefully estimated; the carbonated water was always taken in the morning fasting, after the blad-

der had been emptied; subsequently the urine was gathered every hour or half hour; the specific gravity noticed, etc. The first experiment was made in October and November, the drink used was distilled water artificially impregnated with Carbonic acid gas. 500 cc. were drunk at one time. The amount of urine in the different experiments on average showed an increase of 14.4 per cent. on the days in which the experiments were made. The specific gravity showed a corresponding diminution. The second experiment was made on a healthy person, somewhat chlorotic, æt. twenty-six years, appetite good and regular. He drank, in the morning fasting, a glass of artificial Pyrmont water in two portions, with an interval of ten minutes. Three times during the experiment he drank spring-water. The general average showed an excretion of 665 cc. of urine while taking the carbonated agent, 539 cc. when not taking it. A third experiment was made on a man with Pyrmont water, for eleven days, showing during the first three hours after taking the water an average increase of 36 cc. of urine, while the amount secreted during the first hour after the drink was diminished on average 25 cc. The fourth experiment was made on a man in the same way for sixteen days. The urine showed an average increase in the first three hours after the drink 34 cc. In all the experiments the result was the same, *increased secretion of urine* after the Carbonic acid.⁵⁷

Extremities.—Loss of motion and sensation in the right arm, followed by atrophy. The right leg was cold, somewhat heavy; the arm recovered under galvanism, after many months.⁴⁹—Incomplete paralysis of the left lower extremity, with serous infiltration of the foot, which was painful, not red; and along the dorsal surface of the metatarsus there developed numerous blisters, with brownish-red spots as large as a half dollar.⁵²

Generalities.—Paralysis of the right arm; involuntary evacuations; anasæra of the right arm; over the body various spots, which looked as though they had been burnt, where blisters developed, followed by suppurating ulcers; the whole right arm from the shoulder to the fingers was very much swollen, painful on pressure and motion; the whole right thigh was swollen, especially on the outer side, the skin seemed infiltrated; skin of the right side swollen, not painful; large suppurating sores formed in the right axilla; gangrenous spots on the back of the right hand; sores on the outer side of the right thigh, and on the inner side of both knees, becoming gangrenous.⁵⁴—Loss of consciousness for a long time; paralysis of the bladder; paralysis of the lower extremities; bed-sores over the sacrum; diabetes; abscess in the breast; violent convulsions.⁵⁵—[380.] Found in deep coma, followed by bronchitis, herpes of the lips, and sugar in the urine for three days after the poisoning.⁴⁵—Found in a comatose condition; afterwards pleuro-pneumonia of long duration, and transient diabetes.⁴⁴—Paralysis of the rectum and bladder; persistent idiocy.⁴⁸—Stertorous respiration, paralysis of the limbs, paralysis of the bladder, trismus, convulsions, pneumonia on the right side.⁴⁷—Paralysis of speech; hæmoptysis; recovery only after many months.⁴⁶—Loss of consciousness. Surface of the body cold. Stertorous respiration. Frothing from the mouth. After being aroused he complained of headache, difficulty of swallowing, dryness and scraping in the throat, causing cough; nausea; painful pressure in the epigastric region; confusion of the head; coma; chilliness; numbness of the hands and feet. On the third day, the feeling of paralysis had almost entirely disappeared, the pulse was 120, temperature 39.1°. The

face was pale, covered with copper-red spots of various sizes and forms, which were also found on parts of the trunk and extremities. These spots varied in color, were darkest on the abdomen, and on the anterior portion of the left thigh, where they were as large as the palm of the hand. Tongue dry, covered with a brownish coat. The mucous membrane of the mouth and fauces swollen and injected. Pressure on the stomach painful. The bladder was distended above the navel. For two days the patient passed urine only with great effort, and very seldom. There was a short dry cough. Respiration 26; on deep inspiration stitches in the lower portion of the right half of the chest. Dulceness in the lower portion of the right side of the chest; respiratory murmur impaired, with fine râles; through the other portions of the lungs were coarse râles with increased respiratory murmur. Urine evacuated with the catheter reddish brown. The bladder continued paralyzed; the patient developed pneumonia with infiltration of the right middle and lower portions of the lungs, inflammation of the pharynx and stomach, the vasomotors paralyzed; general loss of power and emaciation; inflammation of the skin; places formed blisters and ulcers, bed-sores; gradual recovery.⁴²—A boy was found dead, a girl, man, and woman were still living. In all the bodies were cold, the limbs were relaxed, pulse imperceptible, pupils dilated, mouth spasmodically closed, respiration irregular and superficial. The blood was very dark-colored. On the second day, the skin and mucous membrane of the woman became gangrenous, the urine dark brown, after which she died.⁴³—On waking (waked by wife at 5.30 A.M.), a general vague distress, and on getting up was giddy; tendency to fall to the side obliged him to sit down for security. Then distress in precordium, a kind of anguish, with sighing respiration, and slight nausea, caused by this precordial distress; then a free fecal evacuation, painless, like a relaxation of bowels which follows fear or excitement (soldiers going into action), with a decided urging; rapid action of heart on exertion; pulsations very audible in left ear. Short cough when moving; precordial distress; had to sit while dressing; sensitive to outer air; circulation very much depressed, and did not regain its tone for a long time. No inclination to urinate like the urgency to stool. Headache came on after moving around; is a throbbing headache, a headache similar to his usual exhausted headaches. No appetite, could not eat his usual hearty breakfast. Mouth thick and pasty; no bad taste; saliva is thick. Hands moist, inclined to be cool.⁴⁴—Has distress across thorax. The distress in precordium so great that she became moist; skin hot (also sensitive to cold air as usual), with nausea. Free evacuation of bowels, no appetite. *Weak*, could not get up. This distress seemed so bad, before she arose, as though she was dying. It stopped menstruation, then three days advanced (usually runs six or seven days). The looseness of the bowels continued and gradually produced tenesmus, six passages in twenty-four hours. Coffee gave decided temporary relief for three hours.⁴⁵—Head, face, and neck livid, and greatly bloated, so as to destroy all recognizable features; the lower lip immensely swollen and turned outwards; the skin discolored and cold, without moisture; extremities quite cold; pulse varying in force and frequency, at times almost imperceptible, the number ranging at different times from 80 to 120; breathing labored, blowing, and irregular; eyelids closed, balls rolled up aslant, pupils varying somewhat but generally dilated; entire insensibility to outward impressions, even of the most painful character; no motion of any muscles except those concerned in respiration, which was chiefly diaphragmatic.⁴⁶—[390.]

His appearance was that of a calm and tranquil sleep; countenance was of a pale leaden aspect; his lips and ears were livid; respiration inaudible at a short distance, extremely short and suffocative, with intervals of suspension; pulse rapid, small, and at times imperceptible; pupils contracted, but the retina was sensible to the impression of light; muscular system relaxed and powerless; he appeared like one whose functions and powers of the system were almost extinguished.³³—Face suffused and purple; expression of agonized suffering; the temporal artery distended and prominent; respiration rapid and sonorous, resembling a groan more than snoring; pulse moderately full but frequent; the muscles seemed rigid and contracted; pupils dilated; vomiting.³⁴—If a person be plunged entirely, with the exception of the head, into a bath of Carbonic acid gas at the ordinary temperature, there will be experienced a decided sensation of heat over the parts of the body in contact with the gas. This sensation of heat is pleasant, and may be compared with that produced by a fine soft garment or padding applied to the skin. If the bath be prolonged for a quarter of an hour, the sensation of heat becomes more intense, and accompanied by a peculiar prickling and tingling; in some persons whose skin is very sensitive it reddens, and there is experienced a burning heat. The whole surface of the body then transpires freely. The urinary secretion is decidedly increased. At last, after the gas has remained in contact with the skin for a longer time (some hours), the skin becomes numb; and anesthesia takes place, so that pricking or pinching can be endured without sensation.³⁵—Normal condition, pulse 68, saliva alkaline, urine clear, acid, temperature in the axilla 26° R. At 9.46, I entered the cabinet containing the gas, and in one minute afterwards experienced a pleasant sensation of heat over all parts of the body. 9.50, the heat had decidedly increased, was especially pronounced in the pit of the stomach and in the internal portions of the limbs, especially of the thighs, associated with an agreeable tingling in the genital organs. 9.54, the heat had increased and was very difficult to bear; only the feet were somewhat cold. 9.56, experienced along the superior dorsal region slight prickling. 10.1, pulse remained the same; the body was very red and covered with perspiration. Extreme heat was felt over all parts of the body, especially in the palms. Two other persons were in the lower part of the same cabinet; they experienced different degrees of oppression. In one the respiration was very much oppressed, with very great desire to lie down. 10.7, my two companions were obliged to open the window; though I was not so greatly inconvenienced, still the fresh air was very agreeable. 10.16, my pulse had fallen to 60, all my limbs were very supple; the general sensation of health was increased. At another time the pulse fell to 52, and there was some pain in the head. Another person in the bath described the sensation as of a band above the eyes, and a very severe frontal pain. The baths were frequently followed by violent itching over all parts of the body. After the bath the saliva was acid. The capillary circulation was much more active. The following were the effects of a bath taken in the evening, July 15th, pulse 76, respiration 19. I entered the bath at 5.10. At 5.13, the heat steadily increasing, the current of gas passing over the body causes an irresistible desire to sneeze. 5.15, burning heat between the shoulders. 5.18, respiration 16, pulse unchanged. 5.22, perspiration begins on the face. 5.25, sensation of burning heat very intense between the shoulders, and drops of sweat rolling down over my chest. 5.30, perspiration general. 5.40, pulse full, regular, 76; perspiration profuse. If

one plunges the head into a bath of Carbonic acid gas, there is immediately experienced heat, especially about the face and eyes. The gas getting into the nose causes prickling in the mucous membrane, sneezing, and profuse secretion of mucus.³⁷—He experienced prickling in the eyes, vertigo, thundering in the ears, suffocation, the face became blue, purple, etc.³⁹.—Profuse lachrymation, heat of the face, rush of blood to the head,⁴⁰.—He inhaled the gas mixed in various proportions with atmospheric air. From 1 to 13 there was very little effect. 1 to 10 caused prickling in the limbs, and a sensation of constriction of the chest. 1 to 4 caused asphyxia and an increase of the pulse from 73 to 137, but it immediately fell to 98 on removing the gas.³⁸.—The secretions are in general increased, perspiration considerable, urinary secretion decidedly increased, and there were frequent efforts to urinate. Often the gas causes rush of blood to the hemorrhoids, increased menstruation, epi-taxis, and often hæmoptysis. In the organs of generation it causes great heat and excitement and turgescence. In women increased menstruation,⁴¹.—Coma, red streaks running along the forearm in the course of the radial nerve, followed by swelling of the subcutaneous tissue, especially on the right side, and along the right supraorbital nerve. Subsequent development of herpes on the lips and on the forearm, and along the ilio-hipic nerve, development of bed-sore,⁴⁰.—After the poisoning there developed zona on the left side of the face, corresponding to the course of the trigeminus nerve,⁵¹.

CARBONEUM SULFURATUM.

Authorities. 24 to 47, A. Delpech, *Nouv. Recherches sur l'Intoxication Spéciale que détermine le Sulfure de Carbone l'Industrie du Caoutchouc Soufflé*, Paris, 1863, twenty-four new cases among workers in rubber factories; 48, J. B. Tavera, *Thèse de l'Intoxication par le Sulfure de Carbone*, Paris, 1865, a woman worker in a rubber factory; 49, same, case of a man; 50 to 52, Gourdon, *Thèse de l'Intoxication par le Sulfure de Carbone*, Paris, 1867, effects on men; 53 to 55, Abel Marché, *Thèse de l'Intoxication par le Sulfure de Carbone*, Paris, 1876; (56 and 57, Bertridg, *Collection in Appendix in Brit. Journ. of Hom.*); 56, Wutzer and Pellengham, *Journ. de Chim. (Lancet, 1830-1 (2), 329)*, general effects; 57, Dr. Geo. Kennison, *Med. Times and Gaz.*, 1868 (2), 77, effects of external application; 58, Dr. Davidson, *ibid.*, 1878 (2), 350, W. G., æt. thirty-three years, took a quantity.

Mind.—Delirium, with incoherent talking,³⁰.—On two occasions he had nervous attacks analogous to hysteria; the face was affected by convulsive movements, but he did not lose consciousness; laughed involuntarily and irrepressibly,⁴².—At one time during the night he seemed to be surrounded by enemies; persons were coming to harm him; he heard imaginary voices and saw strange objects; this continued for four days, and he was taken to the hospital,³⁰.—Hallucinations of vision and hearing, he seemed to see splendid spectacles of carriages, with magnificent objects, talked of the emperor, of money, and of grandeur, often incoherently,²⁴.—Violent cerebral excitement, so that he had to be put into a strait-jacket,²⁴.—It seems to him as if he were constantly in a state of intoxication,²⁹.—Beat his wife,²⁴.—Violent and irascible,²⁹.—Incessant desire to prattle and laugh without cause,²⁴.—[760.] Excessive gayety, followed by sadness and moroseness,⁵⁰.—At first he was excessively gay, but with the

progress of the poisoning he became extremely sad, and lost all energy,³⁸.—Exaggerated gayety, changing to profound sadness and absolute indifference,³⁶.—Screaming,²⁴.—Extreme loquacity,⁴⁶.—Excessive loquacity, but he cannot think of the words he wishes to use; he searches in vain for an expression, and an attempt to speak results in stammering,²⁷.—The patient was sad, preoccupied,^{32 45}.—Preoccupation, with sad, melancholy ideas, indifferent to all about her,⁴⁶.—When interrogated he replied by monosyllables or by signs with the hands; his intellect was greatly impaired, he sought solitude, and like a child was occupied by the objects immediately about him; when not amused he was inactive, seemed distrait,²⁶.—Unable to fix the attention,²⁹.—[770.] Oppression,⁴⁶.—Sad,⁴³.—Profound sadness,^{25 31}, etc.—Profound sadness, with irritable desire to weep,²⁸.—His mood is completely changed; there is now profound sadness, with excessive impatience; at times absolute indifference gives place to the most violent anger, when he manifests great energy,²⁷.—Wept with great facility,⁴⁶.—Irritable,^{26 37 43}.—Great irritability,²⁹.—Excessive irritability, intolerance of contradiction,^{42 55}.—Became exceedingly irritable and violent,^{44 46}.—[780.] He became extremely irritable, violent, and intolerant of contradiction,⁴⁰.—His character changed entirely, at first he became irritable, afterward sombre and sad,⁴¹.—Complete indifference,⁴⁷.—Memory profoundly impaired,^{27 29}.—This man, usually intellectual, has now lost all desire for study; his imagination is wholly occupied with the most absurd reveries,²⁷.—Unable to find words to express his thoughts,³¹.—Incoherence of ideas,²¹.—Loss of memory,^{25 26}, etc.—Progressive loss of memory,^{25 41}.—Weak memory, especially for recent events,⁴⁹.—[790.] Loss of memory, with difficulty in expressing ideas,⁴⁶.—His memory became defective, and he found it very difficult to formulate his ideas, or express them by words,⁴⁹.—Complete loss of memory,^{31 38}.—Stupid; cannot fix his thoughts upon any object, cannot express his thoughts,⁵².—Loss of consciousness, lasting several minutes,⁴⁸.—On two occasions the patient fell suddenly with loss of consciousness,⁴⁹.—One day he fell down, lost consciousness, had an epileptic attack, followed by paralysis of the limbs,³⁸.—Complete loss of consciousness at one time,⁴⁴.

Head.—Vertigo,^{26 27}, etc.—Intense vertigo,^{44 47}.—[800.] Frequent intense vertigo,²¹.—Attacks of vertigo, so that he could scarcely stand, with partial loss of consciousness,⁴¹.—Sudden vertigo, during which he nearly fell to the ground, and had to be taken home,²⁹.—Intense vertigo, with loss of smell; vision was affected in that all objects seem larger than they really are,⁴⁶.—Violent vertigo, reeling so that he was obliged to stop at almost every step,³¹.—Heaviness of the head,²⁹.—Headache,^{27 29}, etc.—Intense headache,^{25 32}, etc.—Most intense headache, with a sensation of painful pressure in the temples (first day),³⁶.—Violent headache, with distressing throbbing at the temples, aggravated towards evening,³⁷.—[810.] Violent intense headache, characterized by compressing pain from one temple to the other, associated with vertigo and great agitation,³⁹.—Constrictive headache,⁴⁹.—Compressing headache,³¹.—Headache like the painful pressure of a tight cap,³².—Very intense compressible headache, especially in the root of the nose, and in the temples; it consisted of a sensation of most violent constriction in the temples, without throbbing; it was associated with extreme stiffness of the neck; this painful stiffness, especially over the posterior portion of the neck, was accompanied by a local sensation of very great coldness; the patient experienced great pain in turning the head; the pain in the neck was associated with very distressing ver-

tigo,³⁸.—Sensation as if a band of iron were compressing the head,³⁴.—Violent intermittent pain in the head and frontal region,⁵⁰.—Lancinating pain in the head,²⁹.—Intense frontal headache,²⁵.—Violent frontal headache, especially in the evening, with vertigo and ringing in the ears,⁵².—[820.] Temporal headache,^{37 47}.—Compressing headache through the temples,⁶¹.—Violent compressive headache through the temples, aggravated by walking, so that each step caused a violent painful shock in the head,⁴⁰.—Intense compressive headache, occupying the temples and occiput,⁴².—Violent pain in the right side of the head,⁵³.

Eye.—At one time was seized with violent inflammation of the right eye, kerato-iritis, treated by Calomel and Atropia,⁴⁴.—Eyes fixed, without expression; pupils dilated, especially the left, but very sluggish; the patient, however, could not see with the right eye as with the left; the ophthalmoscope showed in the former very slender retinal veins, extravasations of blood into the vitreous, extremely fine filaments and points floating in the vitreous,⁴¹.—Ophthalmoscopic examination showed the papillæ very pale and deeply excavated, after several months,⁴².—Progressive atrophy of the optic papillæ of the left eye,⁴⁷.—Pupils mobile, moderately dilated; the field of vision normal; ophthalmoscopic examination revealed a slight paleness of the internal segment of the optic nerve of both sides; there was marked excavation of the papillæ, which were less transparent than normal; the optic nerve had the appearance of a smoked glass,²⁷.—[830.] Pupils sluggish, rather dilated. Ophthalmoscopic examination of the fundus of the eye showed depigmentation and some dilatation of the retinal veins,²⁶.—Pupil incompletely dilated (he had lost his right eye by getting a drop of the vulcanizing mixture into it, followed by intense pain and ophthalmia, and formation of a staphyloma of the cornea and iris),⁴⁴.—Sensation of heat and pricking in the eyes,⁵⁰.—Marked anaesthesia of the cornea, which was insensible to pricking with a pin,⁵².—Marked anaesthesia of the cornea,⁴⁹.—**Lids.** Lids affected by spasmodic trembling,³⁰.—**Pupil.** Pupils dilated,^{26 50 51}.—**Vision.** Vision at first very clear,⁴⁷.—Great susceptibility to light,⁴⁸.—Dimness of vision,⁴⁹.—[840.] Mist before the eyes,^{43 49 50}.—Vision dim, as through a veil,⁴⁷.—Vision dim, as though objects were enveloped in a mist,⁴¹.—Amblyopia; all objects seem covered with a mist,⁴².—Reading was impossible, for though the left eye distinguished objects, the right seemed covered with a mist,⁴¹.—Vision became dim. Permanent and progressive alteration of vision; pupils contracted, insensible, sensitive to Belladonna; the ophthalmoscope showed that the optic was congested,³⁷.—Vision became remarkably affected; there was diminished clearness of objects, which seemed enveloped in mist; on attempting to read the letters moved and trembled; the use of a glass was of no avail,²⁷.—Vision is distinct for a limited distance, but beyond that everything is enveloped in a mist,²⁶.—Vision impaired, so that it was difficult to distinguish objects,³⁴.—Vision became disturbed; a portion of the field of vision was obscured, so that he no longer saw the concluding letters,²⁹.—[850.] Vision feeble, was unable to read the names of the streets,³³.—Vision impaired; all objects seemed to tremble,⁵⁵.—Tremulous vision; all objects seem enveloped in mist,²⁵.—Difficulty in fixing the vision upon any object,²⁶.—Loss of vision of the right eye,⁴¹.—Vision completely lost,²⁹.—Double vision,^{32 50}.

Ear.—Very painful pricking in the external meatus auditorius,⁵⁴.—Impaired hearing,^{26 47 49}.—Hearing very much impaired; it seems as though something were stuffed into the ears,³¹.—[860.] Hearing in the left ear,

entirely lost,⁵⁰.—Ringing in the ears,⁴⁹.—Insupportable tinkling in the ears,²⁸.

Nose.—Profuse bleeding of the nose at times,⁴⁹.—Pain in the nasal fossæ, as though he had inhaled Sulphuric acid,⁵¹.—Impaired smell,^{49 50}.

Face.—At one time his face became very red, but soon afterwards was very pale,⁵³.—He has the aspect of astonishment, with hesitating speech and loss of memory,³⁸.—Countenance expressive of the most profound sadness,²⁶.—Convulsive movements of the lips,⁵².—[870.] The lips were stiff,⁴¹.

Mouth.—Stiffness of the tongue,⁴⁷.—Complete paralysis of the tongue,⁴¹.—Salivation,⁴⁶.—Constant desire to spit,³².—Constant salivation,⁴⁶.—Salivation, with constant desire to spit,²⁵.—Constant spitting on account of excessive secretion of saliva,³¹.—Taste impaired,⁵⁰.—Difficult speech,^{28 47}.—[880.] Speech became embarrassed,²⁸.—It was with difficulty that he could articulate his words, it seemed difficult to move the tongue,^{26 41}.—Extreme difficulty in expressing his ideas, the patient said his tongue would not work,⁴¹.—Experienced great difficulty in articulating words, because he could not move his tongue; the tongue seemed rigid and awkward, causing a kind of stammering,³⁸.—Loss of power of expressing his ideas; his tongue seemed to refuse its office,²⁹.

Stomach.—Increased appetite,³³.—Appetite increased, digestion difficult, irregular, with colic, vomiting, and congestion,⁴⁵.—Enormous and insatiable appetite,³⁰.—Appetite ravenous,²⁷.—Enormous appetite and voracious eating,⁴².—[890.] Ravenous appetite; the patient said he could eat all day long,²⁵.—Marked diminution of appetite,^{24 31}.—Appetite very irregular,^{38 47}.—Complete loss of appetite,⁴⁹.—Anorexia without vomiting,²⁹.—Great thirst,³².—Great desire to drink,²⁴.—Constant nausea,³⁴.—Nausea without vomiting,^{29 36}.—[900.] Vomiting,⁴¹.—Vomiting of food and glairy mucus,⁴².—Violent vomiting at once on taking food,³⁴.—Acute pains in the stomach,³¹.—Frequent cramps in the stomach,³⁵.

Abdomen.—Fetid flatus,³¹.—Profuse fetid intestinal flatus,²⁵.—Colic,^{27 29}.—Frequent colic,²⁶.—Violent colic,^{34 38}.—[910.] Violent colic and diarrhœa for three months,²⁵.—Very acute pain in the groin,³⁴.

Stool.—Profuse diarrhœa,⁴¹.—Fetid diarrhœa,²⁹.—Constant fetid diarrhœa,⁴¹.—Diarrhœa with colic,⁴¹.—Frequent diarrhœa, with sensation of smarting in the anus,²⁹.—Alternations of constipation and diarrhœa,^{27 31 47}.—Intense constipation,^{34 41}.

Urinary Organs.—Intense pain in the kidneys,⁵³.—[920.] Violent cutting in the urethra during micturition,³⁸.—Tenesmus of the bladder and frequent urgent efforts to urinate, and emission of two or three drops at a time,⁴⁹.—Micturition slow and painful,⁵⁰.—Micturition, associated with cutting pain in the urethra,²⁹.—Micturition painful, accompanied by acute burning, pain,²⁶.—Micturition excessively painful, with tenesmus and frequent desire to urinate; urine bloody,³¹.—Smarting during micturition,⁴⁷.—Frequent efforts to urinate; the urine was passed *guttatim*, accompanied by burning in the urethra, and tenesmus of the neck of the bladder,⁵².—Urine highly colored,³⁸.—Urine turbid,³⁶.—[930.] Urine pale and turbid,²⁹.—Urine slightly albuminous, very red and turbid,²⁹.—Urine red, containing an abundance of carbonate and phosphate of lime,⁵¹.

Sexual Organs.—Erections difficult, the patient says "he reaches no result in five times,"⁵⁵.—The testicles are very small,²⁶.—Diminished size of the testicles, with diminished sensation on pressure,²⁶.—Testicles not painful to pressure,⁴⁹.—Sexual excitement,^{25 38 43}.—Excessive sexual excite-

ment,^{24, 47}.—Excessive sexual excitement, constant fatiguing erections giving place speedily to complete impotency,⁴⁸.—[940.] Sexual excitement sometimes amounting to the greatest intensity; at night in particular, he was often taken with veritable rage, during which he had coition with real fury,³³.—Sexual excitement at first, followed after a time by complete loss of power; two or three times his wife became pregnant, but miscarried,⁴².—He became very amorous; erections, however, were seldom, coition much too long, and ejaculation short and incomplete,³⁶.—The sexual appetite at first increased, but afterwards diminished, until there was complete absence of desire; at times an incomplete erection resulted in indefinite coition without emission; or at times an ejaculation was obtained with great difficulty, but was very profuse,²⁷.—Sexual excitement, with loss of power,³⁹.—Sexual excitement after a time gave place to complete indifference,^{23, 31}, etc.—At first sexual instincts were very much excited, but afterwards they disappeared, and at last there was complete impotency,²⁶.—Complete loss of sexual power,^{26, 41, 49}.—Sensation as though the genital organs were completely chilled,³⁶.—Symptoms of uterine catarrh,⁴⁶.—[950.] Profuse menstruation,⁴⁸.—Menses arrested; at the same time she became very large, and had the appearance of being pregnant; after awhile she was seized with violent hæmorrhage, which lasted six months, and was only arrested by the use of ergotin,²⁶.†—All sexual sensation entirely disappeared; there was complete indifference to her husband,³⁵.

Respiratory Organs.—Voice feeble,⁵⁴.—Deep bass voice,²⁴.—During the last two months the sounds of his voice became altered in tone,²⁴.—Tormenting cough and irritation of the bronchi,²⁵.—Breath fetid,³⁶.—Very great difficulty of respiration on ascending stairs,²⁶.—Prolonged expiration,⁴⁸.—[960.] The form of the chest was not at all altered, but expiration was more prolonged than normal,³⁶.—Constant depression of breath,²⁷.—Gets out of breath easily,³¹.

Chest.—Auscultation of the lungs showed prolonged expiration over the posterior portion,²⁶.—Some emphysema of the lungs,⁴⁴.

Heart and Pulse.—The murmur of the first sound of the heart extended along the great vessels,⁴⁷.—The volume of the heart was normal, but with the first sound there was a prolonged murmur, which extended along the vessels of the neck,³⁶.—Slight murmur of the first sound of the heart,³⁷.†—Anæmic murmur of the heart,⁵⁵.—Anæmic murmur in the large vessels,⁵².—[970.] It excites powerfully the activity of the heart and arterial system. Its internal use causes acceleration of the pulse, increased heat, and sanguineous congestion towards the skin and genito-urinary organs. The next remarkable secondary symptoms are abundant diaphoresis, increase of the urinary secretion and of the menstrual discharge,³⁶.—Palpitation,⁴⁴.—Violent palpitation,⁵⁰.—Pulse moderately accelerated,²⁴.—Pulse feeble, compressible,⁵³.

Neck and Back.—Pain and tension in the nape of the neck, followed by development of anthrax, which made rapid progress, was arrested by crucial incision, followed by extremely profuse suppuration; this was followed by improvement and complete cure of the paralysis and general condition,⁴¹.—Pains in the back,³⁴.—Pains in the loins,³⁶.

Extremities.—Trembling of the limbs,^{31, 32, 50}.—Trembling of all the

† Miscarriages are frequent among the women who work in rubber factories.

‡ A short time afterwards the patient died from the rupture of a small aneurism of the aorta.

limbs, especially of the right side,⁴⁰.—[980.] Rigidity of the limbs,^{31 43 45}.—Rigidity of the limbs; this rigidity made rapid progress, involving all the principal articulations of the limbs,²⁷.—Marked rigidity and pains in the joints,⁴⁰.—The tips of the fingers and toes became rigid and insensible,³⁶.—Stiffness of the limbs,^{25 37}.—Pronounced paraplegia, so that the limbs would not support the body,³⁹.—Paralysis and atrophy of the extensor muscles,⁴².—Feebleness of the limbs,³⁴.—Walking was difficult; it was possible to stand upon the left leg with support of the hands, but not upon the right; while in bed the movements of the lower extremities were slow but perfect: motility of the hands was impaired, the fingers were in a state of semiflexion with contraction, but he was unable to extend them without a feeling of stiffness; attempts to grasp anything caused pain,²⁶.—Pains in the limbs,^{36 43}.—[990.] Deepseated pains in the limbs, apparently in the bones and in the muscles,⁴⁰.—Deepseated pains in the limbs,⁴⁸.—Violent pains in the muscles of the limbs,⁴².—Fulgurating pains and sensations as of girdles about the limbs and body,⁵⁰.—Very acute pains in the limbs, especially in the thick muscular portions, associated with cramps, especially in the lower extremities and in the feet,²⁵.—Extremely acute pains, sudden, lightning-like, in the limbs, aggravated by pressure; these flashes of pain accompanied the cramps; at night the intensity of the pains rendered sleep impossible,²⁶.—Cramps in the extremities,^{31 50}.—Cramps in the right leg and arm,⁴¹.—Frequent desire to stretch the limbs,³².—Limbs feel tremulous,³⁴.—[1000.] Very peculiar and pronounced sensation of prickling in the extremities,⁴⁰.—Very marked numbness of the extremities,³⁰.—Loss of sensibility coincident with very acute pains in the articulations and along the limbs, aggravated by movement,²⁶.

Superior Extremities.—The upper extremities were feeble; the pressure of the hand was diminished in force,²⁶.—Terrible pains in the upper extremities, especially at night,³¹.—Very acute pains in the upper extremities, especially in the shoulder-joints,⁵⁰.—Anæsthesia extended over the upper limbs into the thorax,³⁰.—Marked anæsthesia of the arms and hands,³¹.—Prickling and tingling in the arms,⁵¹.—Extreme rigidity of the hands,³¹.—[1010.] Rigidity or insensibility of the hand,²⁹.—The hands became rigid and contracted,³⁰.—While lying in bed, the hands were habitually in a state of semiflexion, and could not be completely extended,²⁶.—The hands became rigid, painful, awkward; extension and flexion were equally difficult,⁴⁷.—Rigidity and awkwardness of the hands,³⁹.—Diminished motility and sensibility of the right hand,⁴¹.—Sensation on the backs of the hands very obtuse; the hands felt as if covered with a glove; the right was worse than the left,⁵⁴.—Painful prickling and numbness of the hands,⁴⁹.—Anæsthesia, numbness, and feebleness of the hands,³⁴.—The fingers became swollen, insensible, and difficult to flex or extend,²⁷.—[1020.] The fingers seemed rigid and insensible; she could not button her clothes,⁴⁶.—The index finger was partially paralyzed with cramps,⁴².—The digits became insensible, stiff, and awkward, unable to take hold of small objects,⁴².—Numbness of the digits, so that it is difficult to take hold of small objects,³⁷.—Insensibility and awkwardness of the fingers,³⁸.

Inferior Extremities.—Trembling of the lower extremities,⁴⁸.—Gait hesitating,⁴⁶.—Gait unsteady,^{38 55}.—Great feebleness of the lower extremities, so that walking was very difficult,³⁵.—Walking became very difficult,⁴¹.—[1030.] While lying down he could move the lower limbs with considerable energy, but on attempting to rise found it very difficult to move them, especially the left,²⁶.—Walking very difficult, the left limb

being more feeble than the right,⁴⁵.—Loss of power in the lower extremities,⁵³.—Great loss of power of the lower extremities,³⁹.—Very great rigidity of the lower extremities,⁴⁴.—Tormented by cramps of the thighs and soles, often lasting half an hour,²⁶.—Very painful cramps in the thighs and feet,²³.—Pains in the lower extremities,³⁰.—Prickling in the lower extremities,⁵⁵.—Sensibility of the lower limbs impaired; the hands, forearms, and arms, especially at the insertion of the deltoid; this loss of sensibility is not found on the body or in the face,²⁸.—[1040.] Diminished sensibility of the lower extremities,³⁰.—Complete insensibility of the lower extremities,⁵⁵.—At one spot on the upper portion of the left leg there is complete insensibility; over the whole extremity sensibility is impaired,⁵⁵.—Rigidity of the knees,³⁸.—Contractions and pain in the muscles of the calves, especially of the right,⁵⁵.—Cramps in the calves and legs,⁴⁹.—Edema of the ankles,³⁰.—Insensibility of the skin of the feet, so that he did not know when the feet touched the ground,⁴⁷.

Generalities.—Pale and emaciated,²⁹.—Great awkwardness,⁵³.—[1050.] The patient is very awkward in her movements,⁴⁸.—Constant twitching of the muscles,³².—Habitual trembling, often lasting twenty-four hours, in a very aggravated form,²⁶.—Trembling of the whole body, especially of the upper extremities,⁴⁸.—Total loss of power,⁴⁹.—Loss of motion and sensibility of the whole right side of the body,⁴¹.—Rigidity of the muscles,⁴⁷.—Analgesia of the right side, the patient could be pinched freely without sensation,⁵⁰.—Hemiplegia became very pronounced; sensibility of the right side of the body very slight; muscular contractility completely lost, but the paralysis was associated with a very pronounced degree of contraction, especially of the arm; every effort to extend it caused pain,⁴¹.—Suddenly one day the face became very much congested, covered with perspiration, expression anxious, uncertain, the whole body covered with sweat, the hands trembled, pulse 120, hard; there were profuse diarrhoea, intense headache, vertigo, erratic pains, great muscular feebleness rendering the gait unsteady, very dim vision, rigidity of the hands, with prickling and diminished sensibility and very pronounced oppression of the chest,⁴³.—[1060.] On admission was lying on chair with all the muscles relaxed, face pale and covered with clammy sweat; lips blue and moist, with saliva and frothy mucus. Eyelids closed; conjunctiva slightly sensitive to touch; pupils dilated and insensible to light. Breathing deep and laborious, almost stertorous; and the breath had a very strong odor of bisulphide of carbon. Pulse 110, regular, but very weak. On the next day, giddiness and slight headache,²⁸.—Loss of all energy,⁴¹.—Extreme lassitude,⁴⁶.—Great feebleness,^{26 30 36}.—Easily fatigued,²⁵.—General weakness,²⁵.—Great muscular feebleness,⁵⁰.—General muscular weakness, with a certain incoördination of the movements, like motor ataxia,⁴⁸.—Tendency to faintness,⁴⁹.—Partial syncope, with convulsive movements of the extremities,⁴¹.—[1070.] Syncope, in which he fell to the ground, lost consciousness, and did not recover for a long time,²⁶.—Cutaneous hyperaesthesia over the whole body except the fingers and toes,³¹.—She seemed to herself enormously swollen over her whole body,²⁸.—General pains, especially acute in the knees,³¹.—Cramps in the muscles,⁴⁷.—The administration of Phosphorus seems to restore nearly all the cases; it seems almost a specific for this poisoning; but often at first there is an aggravation from very small doses,²⁶.—The patient got out of the house, took a long walk, and returned home in complete disorder,²⁴.

Skin.—After it has been applied externally for a minute or two, a sen-

Limbs, especially of the right side,⁴⁹.—[980.] Rigidity of the limbs,^{31 43 45}.—Rigidity of the limbs; this rigidity made rapid progress, involving all the principal articulations of the limbs,²⁷.—Marked rigidity and pains in the joints,⁴⁰.—The tips of the fingers and toes became rigid and insensible,³⁵.—Stiffness of the limbs,^{25 37}.—Pronounced paraplegia, so that the limbs would not support the body,³⁹.—Paralysis and atrophy of the extensor muscles,⁴².—Feebleness of the limbs,³⁴.—Walking was difficult; it was possible to stand upon the left leg with support of the hands, but not upon the right; while in bed the movements of the lower extremities were slow but perfect: motility of the hands was impaired, the fingers were in a state of semiflexion with contraction, but he was unable to extend them without a feeling of stiffness; attempts to grasp anything caused pain,²⁶.—Pains in the limbs,^{36 43}.—[990.] Deepseated pains in the limbs, apparently in the bones and in the muscles,⁴⁰.—Deepseated pains in the limbs,⁴⁸.—Violent pains in the muscles of the limbs,⁴².—Fulgurating pains and sensations as of girdles about the limbs and body,⁵⁰.—Very acute pains in the limbs, especially in the thick muscular portions, associated with cramps, especially in the lower extremities and in the feet,²⁵.—Extremely acute pains, sudden, lightning-like, in the limbs, aggravated by pressure; these flashes of pain accompanied the cramps; at night the intensity of the pains rendered sleep impossible,²⁶.—Cramps in the extremities,^{31 50}.—Cramps in the right leg and arm,⁴¹.—Frequent desire to stretch the limbs,³².—Limbs feel tremulous,³⁴.—[1000.] Very peculiar and pronounced sensation of prickling in the extremities,⁴⁰.—Very marked numbness of the extremities,³⁰.—Loss of sensibility coincident with very acute pains in the articulations and along the limbs, aggravated by movement,²⁶.

Superior Extremities.—The upper extremities were feeble; the pressure of the hand was diminished in force,²⁶.—Terrible pains in the upper extremities, especially at night,⁵¹.—Very acute pains in the upper extremities, especially in the shoulder-joints,⁶⁰.—Anæsthesia extended over the upper limbs into the thorax,³⁰.—Marked anæsthesia of the arms and hands,⁴¹.—Prickling and tingling in the arms,⁵¹.—Extreme rigidity of the hands,³¹.—[1010.] Rigidity or insensibility of the hand,²⁵.—The hands became rigid and contracted,⁵⁰.—While lying in bed, the hands were habitually in a state of semiflexion, and could not be completely extended,²⁶.—The hands became rigid, painful, awkward; extension and flexion were equally difficult,⁴⁷.—Rigidity and awkwardness of the hands,³⁹.—Diminished motility and sensibility of the right hand,⁴¹.—Sensation on the backs of the hands very obtuse; the hands felt as if covered with a glove; the right was worse than the left,⁵⁴.—Painful prickling and numbness of the hands,⁴⁰.—Anæsthesia, numbness, and feebleness of the hands,³⁴.—The fingers became swollen, insensible, and difficult to flex or extend,²⁷.—[1020.] The fingers seemed rigid and insensible; she could not button her clothes,⁴⁶.—The index finger was partially paralyzed with cramps,⁴².—The digits became insensible, stiff, and awkward, unable to take hold of small objects,⁴².—Numbness of the digits, so that it is difficult to take hold of small objects,³⁷.—Insensibility and awkwardness of the fingers,³⁸.

Inferior Extremities.—Trembling of the lower extremities,⁴⁸.—Gait hesitating,⁴⁸.—Gait unsteady,^{38 55}.—Great feebleness of the lower extremities, so that walking was very difficult,³⁵.—Walking became very difficult,⁴⁷.—[1030.] While lying down he could move the lower limbs with considerable energy, but on attempting to rise found it very difficult to move them, especially the left,²⁶.—Walking very difficult, the left limb

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Generalities.—Pale and emaciated,²⁹.—Great awkwardness,⁵³.—[1050.] The patient is very awkward in her movements,⁴⁸.—Constant twitching of the muscles,³².—Habitual trembling, often lasting twenty-four hours, in a very aggravated form,²⁶.—Trembling of the whole body, especially of the upper extremities,⁴¹.—Total loss of power,⁴⁰.—Loss of motion and sensibility of the whole right side of the body,⁴¹.—Rigidity of the muscles,⁴⁷.—Analgesia of the right side, the patient could be pinched freely without sensation,⁵⁰.—Hemiplegia became very pronounced; sensibility of the right side of the body very slight; muscular contractility completely lost, but the paralysis was associated with a very pronounced degree of contraction, especially of the arm; every effort to extend it caused pain,⁴¹.—Suddenly one day the face became very much congested, covered with perspiration, expression anxious, uncertain, the whole body covered with sweat, the hands trembled, pulse 120, hard; there were profuse diarrhoea, intense headache, vertigo, erratic pains, great muscular feebleness rendering the gait unsteady, very dim vision, rigidity of the hands, with prickling and diminished sensibility and very pronounced oppression of the chest,⁴³.—[1060.] On admission was lying on chair with all the muscles relaxed, face pale and covered with clammy sweat; lips blue and moist, with saliva and frothy mucus. Eyelids closed; conjunctiva slightly sensitive to touch; pupils dilated and insensible to light. Breathing deep and laborious, almost stertorous; and the breath had a very strong odor of bisulphide of carbon. Pulse 110, regular, but very weak. On the next day, giddiness and slight headache,³⁸.—Loss of all energy,⁴⁷.—Extreme lassitude,⁴⁶.—Great feebleness,^{26 30 36}.—Easily fatigued,²⁵.—General weakness,²⁵.—Great muscular feebleness,⁵⁰.—General muscular weakness, with a certain incoordination of the movements, like motor ataxia,⁴⁸.—Tendency to faintness,⁴⁹.—Partial syncope, with convulsive movements of the extremities,⁴¹.—[1070.] Syncope, in which he fell to the ground, lost consciousness, and did not recover for a long time,²⁶.—Cutaneous hyperaesthesia over the whole body except the fingers and toes,³¹.—She seemed to herself enormously swollen over her whole body,²⁶.—General pains, especially acute in the knees,³¹.—Cramps in the muscles,⁴⁷.—The administration of Phosphorus seems to restore nearly all the cases; it seems almost a specific for this poisoning; but often at first there is an aggravation from very small doses,²⁶.—The patient got out of the house, took a long walk, and returned home in complete disorder,²⁴.

Skin.—After it has been applied externally for a minute or two, a sen-

sation is felt as if several leeches were biting the part, and after the lapse of two to four minutes more the smarting and pain become rather severe. It is very seldom that any redness of skin is produced,⁵⁷.—Development of a very large number of furuncles,³⁵.—Very acute irritation of the skin, itching and smarting over the chest, thighs, and especially on the scrotum,⁴².—[1080.] Very violent itching of the scrotum,⁴⁰.—Formication of the limbs,³¹.—Painful prickling and formication over the hands and feet,⁴⁴.

Sleep.—Constant sleepiness; often during the night sleep disturbed by sad dreams,³⁹.—Sleepy during the day, sleepless during the night,⁴⁶.—Sleep prolonged and deep,²⁵.—Sleep heavy and profound,³³.—Sleep profound, it was difficult to awaken him,³².—Insomnia,^{24 37}, etc.—Alternations of constant sleepiness and wakefulness,³⁸.—[1090.] Sleep restless, interrupted by starts,^{36 40}.—Sleep disturbed by starting and constant waking; in the morning he was sleepy and difficult to rouse,⁴².—Sleeplessness or sleep with distressing dreams,³⁹.—Sleep restless, tormented by distressing dreams,⁴³.—Sleep interrupted by dreams,⁵¹.—Sad, fatiguing dreams, with a kind of hallucination that she was swollen and enormously distended,⁴⁶.—Terrible dreams of crimes committed under her eyes,³⁵.—Distressing dreams during sleep,³⁸.

Fever.—Sensation of general coldness, especially over the lower limbs,³⁴.—Intense chilliness at night, followed by heat and profuse sweat,⁵².—[1100.] Frequent horripilation,⁴⁹.—Great sensitiveness to cold,^{44 54}.—Fingers cold, rigid, with little sensation,⁴⁵.—Sensation of icy coldness in the lower extremities,³⁶.—Habitual coldness of the feet,⁴⁸.—Icy coldness of the feet and lower extremities,³⁹.—Very profuse sweat,⁴⁷.—Habitual cold sweats,²⁹.

CARUM.

Carum carui, L.

Natural order, Umbelliferæ.

Common name, Caraway.

Preparation, Preparations from the dried fruit.

Authority. C. G. Mitscherlich, Pharm. Journ., vol. ix, 1849, p. 233, effects of large doses of caraway volatile oil.

Diarrhœa.—Increased secretion of urine.—Excite the vascular system and the respiratory organs.

CASTOR.

Authority. 3, William Alexander, M.D., Exper. Essays, London, 1770, p. 83.

[290.] I took a bolus of 10 grains of Castor, made with a little syrup of sugar. I felt no other effects than a few disagreeable eructations. The following day I took a bolus of $\frac{1}{2}$ drachm of Castor; the only effect it had was the eructations, which were pretty much the same as in the last experiment. Two days after this I took 1 drachm. The mercury in the thermometer at my stomach, which before taking it stood at $91\frac{1}{2}^{\circ}$, was in an hour after risen to $92\frac{1}{2}^{\circ}$, where it continued till the thermometer was removed. The eructations were not so frequent, nor so disagreeable as in the former experiments. The two following days, I took two more boluses of Castor; the first containing $1\frac{1}{2}$ drachms, and the second 2 drachms. I was sensible of no other effect than the eructations, which, indeed, were

but few and trifling. The pulse was not affected in any of the experiments, nor the temperature, except in the third experiment.^a

CATALPA.

Catalpa bignonioides, Walt.

Natural order, Bignoniaceæ.

Common name, Catalpa.

Authority. Robert Holmes, Inaug. Thesis, Phila., 1803, p. 29.

Experiment 1.—Two hours after a light breakfast, I took 3 ounces of strong decoction, made with the inner bark of the trunk. My pulse being 70 in a minute, its natural standard.

In five minutes, pulse beat 70 strokes; in ten, 70; in fifteen, 72; in twenty, 74; in twenty-five, 72; in thirty, 68; in thirty-five, 67; in forty, 67; in forty-five, 64; in fifty, 66; in fifty-five, 68; in sixty, 68.

In ten minutes there was no perceptible alteration in my pulse; in twenty, it became rather fuller; in thirty, its fullness increased, and continued so until forty-five minutes had elapsed, when it became smaller and irregular.

About two hours after it was taken, it began to operate as a cathartic, and continuing for some time pretty copiously, without inducing nausea or griping. Neither did my body become costive after its operation.

Experiment 2.—Three hours after my usual dinner, my pulse beating 70 in a minute, I took 2 scruples of the extract obtained from the decoction.

In five minutes, pulse beat 70 strokes; in ten, 74; in fifteen, 74; in twenty, 75; in twenty-five, 80; in thirty, 78; in thirty-five, 76; in forty, 76; in forty-five, 76; in fifty, 74; in fifty-five, 74; in sixty, 72.

In fifteen minutes my pulse had only increased in frequency; about the twentieth it was diminished in fullness, at which time I began to feel sick at my stomach; in thirty was still smaller, and continued so until the expiration of fifty minutes, when it became irregular and weak.

Purgative effects.

Experiment 3.—Mr. T. S., a healthy young man, took a drachm of powdered bark in a small quantity of milk, three hours after dinner. Pulse 72, in a minute.

In five minute, pulse beat 72 strokes; in ten, 72; in fifteen, 70; in twenty, 66; in twenty-five, 64; in thirty, 63; in thirty-five, 62; in forty, 60; in forty-five, 60; in fifty, 62; in fifty-five, 64; in sixty, 66.

About the twentieth minute his pulse was much fuller, with some tension; and continued so without much variation until forty-five minutes had elapsed, at which time it became small and irregular, and he complained of a slight degree of headache, which lasted some time, after which his pulse began to assume its natural pulsation.

Experiment 4.—At 11 A.M. I took 3½ scruples of the powdered bark, diffused in a little milk. My pulse beating 72 strokes in a minute.

In five minutes, pulse beat 72 strokes; in ten, 74; in fifteen, 74; in twenty, 76; in twenty-five, 76; in thirty, 77; in thirty-five, 78; in forty, 76; in forty-five, 76; in fifty, 74; in fifty-five, 74; in sixty, 72.

In ten minutes my pulse became fuller; in fifteen its fulness had increased, and continued so without much variation until the expiration of thirty minutes, when it began to grow weak and much smaller. At this time I felt considerable nausea, which lasted for some time. It, however, went off, and my pulse returned to its natural pulsation.

The same dose was repeated upon a healthy young man, Mr. M. C.

It produced no other effect than an alteration in his pulse.

Experiment 5.—Three hours after my usual breakfast I took 3 ounces of a strong decoction of the leaves. Pulse 72.

In five minutes, pulse beat 80 strokes; in ten, 84; in fifteen, 80; in twenty, 80; in twenty-five, 76; in thirty, 76; in thirty-five, 78; in forty, 76; in forty-five, 76; in fifty, 76; in fifty-five, 74; in sixty, 74.

In five minutes my pulse increased in force and frequency, which continued until twenty; in twenty-five it was much diminished in fulness; at which time I began to feel sick; my pulse continued small and weak until the expiration of fifty minutes, when it became fuller and began to assume its ordinary stroke.

Began to feel sick (after twenty-five minutes); which lasted a considerable length of time.

Copious purgative effect.

Experiment 6.—Two hours and a half after dinner I gave Mr. J. P. 2 scruples of extract from decoction of leaves. Pulse 74.

In five minutes, pulse beat 74 strokes; in ten, 75; in fifteen, 74; in twenty, 76; in twenty-five, 72; in thirty, 72; in thirty-five, 67; in forty, 67; in forty-five, 67; in fifty, 69; in fifty-five, 70; in sixty, 72.

In fifteen minutes his pulse was much increased in fulness, and continued so until twenty-five; in thirty it became much smaller; in thirty-five it was small and weak; continued weak until fifty minutes had elapsed, when it began to recover its natural stroke.

Fulness of the head, an unusual symptom to him (after thirty-five minutes).

Drowsiness, an unusual symptom to him (after thirty five minutes).

Experiment 7.—At 9.30 A.M. I gave Mr. M. C., a young man in good health, 3 ounces of strong infusion of leaves. Pulse 70.

In five minutes, pulse beat 72 strokes; in ten, 73; in fifteen, 73; in twenty, 75; in twenty-five, 75; in thirty, 76; in thirty-five, 76; in forty, 76; in forty-five, 76; in fifty, 74; in fifty-five, 74; in sixty, 72.

About the twentieth minute his pulse was much fuller, which, however, declined towards the thirty-fifth. It continued small until the expiration of fifty-minutes, when it began to take on its ordinary stroke.

About two hours and a half after my usual dinner, I took 3 ounces of strong decoction of the recent root. Pulse 72.

In five minutes, pulse beat 72 strokes; in ten, 74; in fifteen, 72; in twenty, 66; in twenty-five, 66; in thirty, 65; in thirty-five, 68; in forty, 68; in forty-five, 68; in fifty, 70; in fifty-five, 70; in sixty, 72.

In ten minutes my pulse was much fuller; in twenty it was increased; in thirty-five it was much smaller, and a little irregular; in fifty it began to assume its natural pulsation.

Operated as a purgative, without inducing any disagreeable sensation

(soon after fifty minutes). Whenever I took the decoction of the bark of the root, or bark of the trunk, in the quantity of 3 ounces, it invariably had a purgative effect, which was very mild.

3 scruples of extract of the pith.

But little alteration of the pulse.

CAUSTICUM.

Authorities. 15, Zeit. Ver. Hom. Ærz. G^{es}t., vol. i, p. 429, a man, aged forty-six years, drank a swallow; 16, Darto-Massart, Gaz. Med. de Paris, Nov., 1836 (Am. Journ. Med. Sci., vol. xxi, p. 247), Mr. D., aged thirty-five years, drank some instead of wine; 17, Dr. Jackson, Bost. Med. and Surg. Journ., vol. lxvii, 1862, p. 362, a man, aged seventy-two years, drank some, and at once took a large quantity of sweet oil, after four months he entered the hospital; 18, John W. Ogle, M.D., St. George Hosp. Rep., vol. iii, 1868, Elizabeth G., aged forty-four years, swallowed a quantity of American potash; 19, J. D. Norris, M.D., Maryland Med. Journ., a child, aged four years, swallowed a dessertspoonful of a solution.

Face.—Face pale, presenting the appearance of intense suffering (after a quarter of an hour),¹⁶.

Mouth.—Tongue and back part of the mouth threw off a very thick and tough membrane (after two days),¹⁶.—Mouth and fauces very corroded; on introducing the stomach-pump, small shreds of softened membrane were found clinging to the tube when removed,¹⁶.—*On the following morning the mouth and fauces were in an extremely affected state. Everywhere the epidermal coating of the mucous membrane had been abraded, but still hung partly to it in large pieces, the mucous membrane itself was swollen and loose, the tongue was injected scarlet, the papillæ swollen, arch of the palate and the uvula extraordinarily swollen, the colors of these parts intensely dark red. In the mouth and fauces the patient had the sensation as if glowing coals were there, together with constant pressure to swallow and hawk up, which increased the pain; he discharged in a large quantity a secretion consisting partly of saliva, partly of mucus. The voice was hoarse and nasal, his disposition bounding on desperation. To these symptoms were added remarkable febrile symptoms (pulse 120) and unquenchable thirst,*¹⁵.

Throat.—Ejection of mucous membrane of œsophagus presenting perfect cylinder of tube,¹⁹.—Pain along course of œsophagus,¹⁹.—Dysphagia from the first, and had lived mainly on a liquid farinaceous diet (after four months); probangs were used, and there was reported a stricture five and a half inches from the incisor teeth; probang used till some weeks before his death, when he said he could swallow well enough without it,¹⁷.

Stomach.—[1540.] Nausea (soon),¹⁶.—Regurgitation,¹⁹.—Vomited immediately,¹⁸.—Severe pains in the epigastric region (soon),¹⁶.—Great pain in the region of the stomach and the course of the diaphragm,¹⁸.

Stool.—Black stool followed the perspiration,¹⁶.

Fever.—General coldness (after a quarter of an hour),¹⁶.—Slight perspiration continued for two hours,¹⁶.

CELTIS.

Celtis occidentalis, L.

Natural order, Urticaceæ.

Common name. Hackberry tree, Nettle tree.

Preparation, Tincture of bark.

Authority. 1, J. S. Wright, U. S. Med. Invest., New Series, 9, 1879, p. 339, proving with tincture made from bark; took $\frac{1}{4}$ ounce at 11 A.M. and 2 P.M., symptoms after second dose; 2, *ibid.*, a girl, whose ears were sore and swelled from piercing and wearing cheap rings in them, took 2 ounces in one day.

One hour after, cold and hot creeping all over the body; pulse quick and full; bones ache; flesh sore to pressure on chair-back, cannot sit on hard bench. Stretching of limbs; skin red and puffed; bloodvessels puffed; thrilling sensation on the skin all over the body, as if pricked with the points of needles. Sharp pains through the lungs, sticking pain over the right eye. Sleep full of dreams of business; next morning tired and weak, with headache; throat sore,¹.—Her face and body swelled. I gave *Urtica capitata*; the next day the swelling had left the face and body, but her feet and ankles were swollen so that she could not wear shoes,².

CEPHALANTHUS.

Cephalanthus occidentalis, L.

Natural order, Rubiaceæ.

Common name, Button-bush.

Authority. E. D. Wright, M.D., Am. Hom. Obs., 1875, p. 177; took $\frac{1}{2}$ ounce tincture on two successive days.

Nervous, excited; felt light and easy, happy (first day).—Toothache (second day).—Raw, sore throat (first day).—Bowels constipated (first day).—Bowels loose, stool offensive; almost affected by the piles (second day).—Gripping pains in the lungs (?); in body and limbs, especially in the joints (second day).—Joints of the fingers lame (second day).—Hard dreams about fighting, quarrelling; restless and tossing over (second day).

CHAMOMILLA.

Authorities. 23, Sharp's Essays on Medicine, tenth edition (1874), p. 790, proving of 1st dil. ($\frac{1}{1000}$ drop of sap of the plant); 24, Sharp, Month. Hom. Rev., vol. xx, 1876, p. 746, a man took 5 drops mother tincture (half sap and half spirit) at night; 24 a, same, afterwards took 10 drops at night.

Rumbling in the stomach (after half an hour),^{21 21a}.—[1450.] Slight indigestion during the day,^{21a}.—Next morning less free evacuation than usual; and this continued the same for four days afterwards; the color darker than usual,²¹.—Morning evacuations as usual in quantity, but rather darker (second day); no evacuation (third day); evacuation very small in quantity (fourth day),^{21a}.—On a healthy person its effect is to produce motions like those of a healthy baby; it increases the secretion of healthy bile,²³.

CHENOPODIUM ANTHELMINTICUM.

Authorities. 2, P. T. T., Bost. Med. and Surg. Journ., vol. xlv, 1851, p. 373, poisoning of a child; 3, Mr. Wm. Smith, Pharm. Journ., Sec. Ser., vol. iv, 1862, p. 330, a man took about half an ounce; 4, T. R. Brown, M.D., Maryland Med. Journ., November, 1878, p. 20, Mr. X., æt. thirty-one years, took about 1½ ounces of worm-seed oil and 30 drops of turpentine, death in five days.

The symptoms were those of a narcotico-acrid poison, affecting the brain, spinal system, and stomach. He was insensible, convulsed, and foaming at the mouth; he, however, recovered under the use of emetics, combined with stimulants and demulcents. All remembrance of having taken the poison was completely wanting on recovery.³—Deep, heavy, stertorous breathing, accompanied by a very peculiar rattle, as if there were a ball rolling loose in the trachea; pulse small, weak, frequent, and feeble; eyes insensible to light, or even external objects; convulsive movements of the right half of the body; extremities cold; any attempt at deglutition threatened instant suffocation.²—Disagreeable eructations; nausea; staggering like a drunken man when walking; deafness to the sound of the voice, but exquisite sensitiveness to the sounds of passing vehicles; he remarked as each vehicle rolled by that it sounded like the roaring of immense cannons right into his ear; also annoying buzzing in ears. His manner in smoking was peculiar. He would scarcely light the cigar before he would lay it down again, and take a fresh one, arguing clearly some perversion in taste. This was kept up until interdicted, and by the afternoon his mantel-piece was strewn with cigars only slightly used. Not the least disposition to engage in conversation. To one of his attendants he showed signs of distinct aphasia. He clearly wanted him to get or do something for him, but could not make himself understood. His friend replied by writing, "Don't understand," at the same time handing him the paper and pencil with which to make known his wish. After holding them in his hand in a pensive state for some minutes, with a sort of flourish, he wrote in a perfectly distinct hand, "The paper mu," waited awhile, and then with a painful expression of the realization of his difficulty, returned the materials and lay down. I then repeated the attempt by asking him what medicine he had bought while away from home. After similar preliminaries as before he only managed to write two letters, "Th." In reply to my question as to how he felt, he responded, "I feel all right." The latter, like the other words, were written in a perfectly distinct manner. During all this time his deafness, as described, was progressive, and became so pronounced as to make it impossible to talk to him. Still there was the same kind of sensitiveness to other sounds. For example, when the tea-bell rang, though he was in the third-story, three flights from where the sound came, he, without notice from members of his family, to their utter astonishment, got up and walked as deliberately as ever into the dining-room. He did not seem to know his accustomed seat, and sat at the wrong place. During the afternoon the aphasia was complete, so that he no longer found it possible to express his ideas to any one, which seemed to amuse him very much, as he laughed heartily. His behavior all this time deserves comment. Whatever he did he would keep repeating it for a considerable time. When I entered the room he rose,

shook me cordially and firmly by the hand, and then took his seat. In about a minute he arose, solemnly came forward and again shook hands with me, so that by twenty minutes he had shaken hands with me as many times. He then began to wash his hands, and though the basin contained no water, he went through the form of using soap and wiping with a towel as often as a dozen times in one hour. Many acts of similar import might be offered, some of which I observed and others were described by members of his family. I joined the patient at tea for the purpose of watching what up to this time had been to me an unsolved mystery. He appeared to relish his food, taking singly tea and bread. Towards the close of the meal, while grasping a fragment of bread, there was a distinct spasm of the right forearm and hand. His fingers were firmly clenched, and his hand forcibly flexed on the forearm. He was assisted to his room, his walk entirely natural, and when being placed on his bed he showed some resistance in striking at me. He at once commenced to groan, draw himself up, and tossed from side to side of the bed, suggesting abdominal distress. He soon became unconscious, and from his movements in bed it was clear that he was paralyzed in the right arm. This member was dragged helplessly after him, as my attention was first called to it by a looker on. The next day there continued impairment of motion and sensation of the right side, together with insensibility to touch of the right eyeball. During the third day there were frequent twitchings and stiffness of the right limbs, these culminated in a unilateral convulsion at daylight on the fourth day. At about noon of the third day he passed, as he continued to do to the end, except when drawn off, a large quantity of urine involuntarily in bed. In the afternoon the heavy breathing, with flopping of the cheeks, of apoplexy appeared. There was also more or less constant regurgitation of yellow frothy material from the mouth, which like the evacuation from his skin smelled of wormseed. The accumulation of this material would at times be so profuse as to embarrass respiration. During one of the attacks of dyspnea, and while in a drenching sweat, which suggested the approach of dissolution, he was gently turned in bed, immediately a general convulsion, markedly opisthotonic, appeared, lasting about two minutes, despite the use of chloroform. By this time a decided icterus appeared, which had been only noticed the day before. He died about five days from the beginning of his illness in a profound coma, and with a high temperature in his axilla.⁴

CHIMAPHILA.

Authorities. (2 to 4, Essay by John S. Mitchell, Philada., 1803.) **2**, W. M. Walmsley took 40 grains of fresh leaves of *P. mac.* at 10.30 A.M. (pulse 80); **3**, Dr. A. Gregg, Jr., took 55 grains of same plant, with no effect; **4** grains of fresh leaves of *P. umbel.*, after twenty minutes 20 grains more, pulse 70, at 1.30 P.M.; **3a**, same, took 25 grains at 11 A.M., pulse 72; **3b**, same, took at 9 A.M. 30 grains, pulse 76; **4**, Dr. Mitchell applied the bruised leaves of *P. mac.*, wet occasionally with vinegar, to one arm, without result, as when given internally; at the same time applied *P. umbel.* in same way to the other arm; **5**, H. P. Gatchell, *Am. Hom. Obs.*, vol. xiii, New Ser., 3, 1876, p. 73, proving of *P. rotund.*; **6**, H. P. Gatchell, *Am. Hom. Obs.*, vol. xiii, New Ser., 3, 1876, p. 75, proving of *P. mac.*; **7**, *ibid.*, another proving.

Mind.—Very nervous, cannot bear anything at all; hot, irritable, restless; thinks diseased state of the blood irritates the skin, as before the eruption of erysipelas, scarlet fever, or measles; itches terribly.¹—Melancholy.⁵—Stupid and sleepy.⁵—Becomes partially unconscious, feels like fainting, as if brain paralyzed, mind gone.⁵

Head.—Some dizziness in the head (after seventy minutes).^{3a}—Head heavy, feels as if he would fall down on it.⁵—Wants the head pressed.¹—Slight headache (after forty minutes).^{3b}—Headache, with pain in the bowels.¹—[10.] Feeling of weight, as if in brain, along the brow.⁵—Sharp pains and heat in interior of head, unfitting for exertion.¹—Pain in and above the forehead.¹—Dull heavy pain in the whole front and top of the head.⁶—Pain over right eye.⁵

Eye.—At first eyes clear, now they burn; lids feel sore.⁵

Nose.—Nose runs.⁵

Mouth.—Hollow teeth ache.⁵—Tongue feels stiff and thick in the middle, cannot raise it.⁵—Mouth dry.⁵

Stomach.—[20.] Extreme gnawing hunger.¹—Slight nausea at the stomach (after fifteen minutes); nausea stationary after repeating the medicine (after twenty minutes).³—Feels drunk, and as if stomach burnt up with liquor, as if hard, dry, and tough, and as if rennet would be good for it.⁵—Burning in stomach.⁵

Abdomen.—Sharp pain in right hypochondrium.⁵—Liver feels as if enlarged.⁵—Bowels hard and swollen; thinks the glands are swollen; bowels very painful, sore, and hard; feels as if dropsy of abdomen.¹—As if bowels were sore and swollen on right side.⁵—Coliclike pains between the pubes and navel.¹—Pain in bowels.¹—[30.] Uneasy sensations in his bowels (after one hundred minutes).³

Stool.—After the colic pains a diarrhœa, not very weakening.¹

Sexual Organs.—Aching in vagina, as if labia inflamed.⁵—Sensation of swelling in labia.⁶—Stinging in labia, as if boils there.⁶—Excitement of sexual system.¹

Pulse.—In five minutes, pulse 80; ten, 80; fifteen, 80; twenty, 80; thirty, 79; thirty-five, 79; forty, 80; sixty, 80. No increase either in fulness or force.²—In five minutes, pulse 74; ten, 84; fifteen, 88; twenty, 75; twenty-five, 76; thirty, 79; thirty-five, 76; forty, 74; forty-five, 71; fifty, 71; fifty-five, 70; sixty, 65; sixty-five, 66; seventy, 69; seventy-five, 66; ninety, 64; one hundred and five, 64; one hundred and twenty, 60. Pulse somewhat weaker (after one hundred minutes).³—In ten minutes, pulse 66; fifteen, 66; twenty, 64; twenty-five, 62; thirty, 62; forty, 60; fifty, 60; sixty, 62; seventy, 60; eighty, 57; ninety, 60. Pulse fuller (after ten minutes); weak (after seventy minutes).^{3a}—In five minutes, pulse 76; ten, 76; fifteen, 78; twenty, 80; twenty-five, 80; thirty, 80; forty, 78; fifty, 76; sixty, 76; seventy, 72; eighty, 73; ninety, 72; one hundred and five, 76; one hundred and fifteen, 76. Pulse fuller and harder (after twenty minutes).^{3b}

Neck and Back.—[40.] Feels as if the neck were too small and tired.¹—Needlelike pains in the sacrum.¹

Extremities.—Limbs feel full, as if distended; feeling like that from erysipelas.¹—Sensation of swelling in the arm-pits.⁶—Pain from armpit to scapulae.⁵—Right arm as if paralyzed.¹—Pain in bones of forefinger.¹—Needlelike pains in the hip-bones.¹—Legs and arms weak.⁵

Generalities.—Seems to run all through the blood as a stimulant.⁵

—[50.] Thinks it a very penetrating medicine,⁷.—Feels*like fainting,⁵.—Whole system utterly relaxed, no strength, no vigor,⁵.—Pains as in all the bones,⁷.

Skin.—A great deal of inflammation, which continued for six or eight days, accompanied with intolerable itching in the part, and succeeded by desquamation; this was considerably different from the vesication produced by Cantharides; for besides that the cuticle was very little raised with water, the inflammation extended to a much greater distance round the part, and the next day the blister was circumscribed with an eruption, which continued to increase for some time, having very much the appearance of a ring-worm,⁴.

Sleep.—Continued to be drowsy, with very weak feeling in head,⁵.

Chill.—Chill seems all over, flesh quivers,⁵.—As if blood on fire,⁷.—Exceedingly hot, as of blood boiling, but cannot sweat; skin feels dry,⁷.—Blood as if heated, with prickling,⁷.—[60.] Hot flashes,⁵.—Feet burn,⁵.

CHINA.

Authority. 76, John M. Walker, Inaug. Diss., Phil., 1803, experiment on pulse.

One grain pulv. Cort. per. rub.: Pulse 66, natural, on taking; no change (after five minutes); 67, full (after ten and fifteen minutes); 68, full and tense (after twenty minutes); 69, full and tense (after twenty-five and thirty minutes); 70, full and tense (after thirty-five minutes); 71, strong and regular (after forty to seventy minutes); 72 (after forty-five and fifty minutes); 73 (after fifty-five and sixty minutes); 74, slight headache (after seventy-five minutes); 75, full (after eighty-five minutes); 76, full (after ninety-five minutes); 77, nearly natural (after one hundred and five minutes).

12 grains of resin of P. bark: Pulse 64, natural, on taking; full and regular (after five to twenty-five minutes); 65 (after ten minutes); 66 (after fifteen minutes); 68 (after twenty and twenty-five minutes); full and tense (after thirty to forty-five minutes); 69 (after thirty minutes); 70 (after thirty-five and forty minutes); 71 (after forty-five minutes); regular (after fifty to sixty minutes); 72 (after fifty minutes); 73 (after fifty-five and sixty minutes); full, face flushed (after sixty-five to eighty minutes); 74 (after sixty-five and seventy minutes); 75 (after seventy-five minutes); 76 (after eighty minutes); 77, diminished in fullness (after eighty-five and ninety-five minutes).

12 grains extract of P. bark. Pulse, 66, natural, on taking; 60, full and strong (after five minutes); 67 (after ten minutes); 68 (after fifteen minutes); 69 (after twenty to thirty minutes); full (after thirty-five to sixty-five minutes); 70 (after thirty-five and forty minutes); 72 (after forty-five to fifty-five minutes); 73, full and tense (after sixty minutes); 74, full and tense (after sixty-five minutes); 75, diminished in strength (after seventy-five minutes); 76 (after ninety-five minutes).

12 grains gum of P. bark: Pulse 72, natural, on taking; no change (after five minutes); 73, fuller (after ten minutes); 75, fuller (after fifteen and twenty minutes); tense (after twenty-five to thirty-five minutes); 77 (after twenty-five minutes); 78 (after thirty minutes); 80 (after thirty-five minutes); fuller and stronger (after forty to fifty-five minutes); 81 (after

forty minutes); 82 (after forty-five to fifty-five minutes); full (after sixty to seventy minutes); 80 (after sixty minutes); 79 (after sixty-five minutes); 76 (after seventy minutes); 75 (after seventy-five minutes).

2 ounces decoction of P. bark: Pulse 72, natural, on taking; 62, soft (after five minutes); 63, soft (after ten minutes); 65 (after fifteen and twenty minutes); fullness (after twenty to thirty minutes); 67 (after twenty-five minutes); 68 (after thirty minutes); considerable tension (after forty to seventy minutes); 69 (after forty minutes); 71 (after fifty minutes); 72 (after sixty minutes); 73 (after seventy minutes); 71 (after seventy-five minutes); tense, with flushing of the face (after seventy-five to ninety minutes); 77 (after eighty minutes); 69 (after ninety minutes); 66, full (after one hundred minutes).

2 ounces infusion of P. bark: Pulse 64, natural, on taking; no change (after five minutes); 66 (after ten minutes); 68 (after fifteen minutes); 69, fuller (after twenty minutes); 70, fuller (after twenty-five minutes); 72 (after thirty minutes); tension increased (after thirty to fifty minutes); 73 (after forty minutes); 76 (after sixty to seventy-five minutes); full and tense (after sixty to eighty minutes); 74 (after eighty and eighty-five minutes); full (after eighty-five and ninety minutes); 73 (after ninety minutes); 66 (after one hundred minutes),⁷⁶.

CHININUM SULFURICUM.

Authorities. 55, C. Robbins, M.D., Bost. Med. and Surg. Journ., vol. xxxiii, 1850, p. 560, Mr. O., æt. thirty years, took half a drachm; 56, Chas. E. Slocum, Med. Rec., vol. xii, 1877, p. 334, effects on three ladies; 57, Prof. Köbner, Berlin, Klin. Woch., 1877 (Med. Rec., 12, p. 601), effects on a large, powerfully built woman, æt. twenty-eight years; 58, Prof. Köbner, Berlin, Klin. Woch. (Gaz. Med., Paris, 1877, p. 590), a patient, suffering from facial neuralgia, took 1 gram. 59, Dr. Ricklin, Gaz. Med. de Paris, 1877, p. 590, a young woman, suffering from bronchitis, took a powder; 60, Henry M. Field, M.D., Lond. Med. Rec., vol. xiv, 1878, p. 427, effects of ordinary allopathic doses on a lady for chills and fever; 61, John S. Linsley, M.D., MSS., took at one dose 30 grains at night.

Great nervous excitement, with wakefulness all night. Sensation in auditory region, as if a horse railroad, with its continual roar and rumble, had its course through the brain incessantly; worse alternate days for one week,⁶¹.—In about three-quarters of an hour he began to feel as if intoxicated; this feeling, which was precisely similar to that produced by an overdose of alcohol, increased so rapidly that in about fifteen minutes his ideas became confused, and he was unable to walk without staggering; the next morning he complained of loss of appetite, dull pain, and dizziness of the head, and a general languor and debility, and incapacity for business,⁵⁵.—She said that it poisoned her; "It is as if every drop of blood and every tingling nerve were in my skin." There was great heat, œdema in some places, especially in face and hands, great increase of cutaneous sensitiveness; all followed in a few days by desquamation of the cuticle. With these accidents were associated more or less gastric disturbance, and upon one occasion violent and repeated vomiting, headache, and delirium. Even 4 to 5 grains Sulphate of quinine for the twenty-four hours produced a light attack of the skin disease, enough to suggest alarming results should the

usual 1 to 3 gram doses be prescribed.⁶⁰.—After two hours she was taken with internal chills, followed by very violent præcordial anxiety, with nausea and vomiting of mucus. In a few minutes the patient complained of very violent headache, accompanied by repeated chills, followed by a sensation of burning heat, especially in the head, and then over the whole surface of the body. On the next morning the fever was intense, and there was an exanthematous eruption, associated with burning heat and distressing itching. The patient also complained of difficulty of swallowing and cutting pains in the throat. The redness extended over the face, neck, shoulders, back, and limbs, and disappeared on pressure. The skin was very sensitive to touch, especially about the throat. There was œdema of the lids. The redness finally appeared on the extremities, where, however, it was not continuous, but in isolated patches, especially upon the anterior surface of the extremities. On the posterior surface of the thighs there was a series of papules very prominent, scattered, surrounded by a red areola. The posterior portion of the pharynx was deep red. The tongue did not present the usual characteristics of scarlatina, and on consultation it was decided that the symptoms were due to the Chinin., analogous cases having been seen by the consulting physician. On the ninth day intense desquamation commenced and lasted three weeks. The temperature was high during the first days, 39.8° C., pulse 124. Some time afterwards this patient had another attack of bronchitis, and took Chinin. again, which was followed by the same symptoms, but in a less violent degree. Desquamation commenced on the fifth day, on the palms and soles, and lasted three weeks.⁶¹.—[1080.] She was attacked with a syndrome, closely resembling that of scarlet fever, whenever she took even a small dose of Quinine. The symptoms consisted in a chill, which was sometimes repeated, a feeling of præcordial anxiety, nausea, vomiting, intense headache, high fever, and angina. A few hours after the chill an erythematous eruption made its appearance on the face, and spread rapidly over the entire body. It was attended by intense burning and itching, by slight œdema of the face, and injection of the conjunctiva. The color disappeared for a moment on pressure. The eruption on one occasion completely covered the entire body; on another it was confluent on the upper part of the body, but discrete on the legs. On this occasion the eruption on the legs was slightly papular, and the lower border of the confluent part was not sharp, but gradually faded into the healthy skin. After a variable length of time, according to the amount of Quinine taken, the symptoms abated and desquamation began. The angina affected only the posterior wall of the pharynx, the soft palate and pillars being normal. Three times in the course of five months the patient was seized with these attacks. The first time the exanthem broke out after 3½ grains of Quinine had been taken. As a diagnosis of scarlet fever was made, the Quinine was continued for eight days, and the eruption persisted for the same length of time. Desquamation then began, and continued for six weeks, and on the soles of the feet, in fact, for nine weeks. The fever was high and persistent, and the prostration was very great. Three months later the exanthem reappeared after a dose of 2¼ grains of Quinine. The stage of eruption lasted four days, and the desquamation three weeks. The third time the exanthem made its appearance after a dose of only 1½ grains of Quinine. The stage of eruption lasted only two and a half days, and the desquamation fourteen days. The affection this time ran a milder and shorter course than on the two previous occasions. Dr. Von Heusinger, of Marburg, states that he has

met with two cases, in which symptoms entirely analogous to those described above, were produced whenever even very small doses of Quinine were administered. In these cases, however, the eruption was confined to the face. Both patients were women. One of them was at one time able to take Quinine without inconvenience,⁵⁷—I have had three patients, all ladies, with whom Sulphate of quinine has produced peculiarly unpleasant effects. Very soon, usually within half an hour, in one case almost immediately after the medicine was taken, the face became suffused with an erythematous eruption, and a tingling-itching sensation, very severe and distressing in its nature, followed and extended over the body and extremities. The effects produced in the three cases varied somewhat, but mainly were identical with the symptoms of *urticaria ab injectis*. In case first, I have at long intervals prescribed the various preparations from the bark unknown to her, and invariably with the same result, the less active preparations being the more slow in their effect. In this case nausea, vomiting, and great gastric distress followed the cutaneous irritation. In case second; there was produced considerable œdema, with wheals, ending with desquamation. In case third, the cutaneous eruption and irritation were not so severe as with the others, but the pulmonary oppression and constriction of the throat were the more prominent symptoms,⁵⁸—On the same day there developed a scarlatina-like eruption over the whole body, with very high fever, delirium, dyspnœa, and all the symptoms of pulmonary congestion. Scarlatina, with pleuro-pneumonia, was diagnosticated. The eruption disappeared on the fourth day, and was followed by desquamation, which lasted three weeks,⁵⁹.

CHIONANTHUS.

Chionanthus virginica, L.

Natural order, Oleaceæ.

Common name, Fringe tree.

Authority. Dr. Scudder, Eclectic Med. Journ., May, 1876, (U. S. Med. Invest., N. S., 3, 1878, p. 562).

In good health, except some derangement of brain, taking the form of aphasia. Took 30 drops of a strong tincture at 1 P.M.; at 2.30 P.M., sensations of contractions in the stomach, as if some living thing was moving in it, with uneasy sensations in the region of the liver, and occasionally in the region of the spleen; rheumatic pain in left ankle and tarsal bones. Unpleasant sensations in the stomach and hypochondria increase, and at 3 P.M. they have become very annoying; sensation like spasms, or palpitations of the heart, in the stomach; uneasy sensation in the region of the sigmoid flexure, as if caused by flatulence; uneasiness in right hypochondrium, extending to the left iliac region; tongue coated yellow in the centre, previously clean; pulse markedly smaller and weaker; rheumatic pain in left carpo-metacarpal articulation of left thumb; evacuation of bowels at bedtime of black, tarry-looking fæces. Slept well; on waking had pain for a short time in the spine, from the seventh to the tenth dorsal vertebræ. The head was remarkably clear for a few hours, and all the symptoms of aphasia had disappeared (unfortunately they returned the next day, though not so bad). The sensations in the region of the stomach, liver, and spleen were so marked that no one could mistake the locality of the action, or the certainty of the action. I gave it to Mr. G. with about the same result, and to Mrs. N., who found a single dose of 10 drops produce all the sensa-

tions named in so unpleasant a form, that she could not be induced to repeat the remedy. In the last case there was a feeling as if the bowels were about to move off violently, from the action of a purgative, with the nausea usually associated with such an action, though there was no discharge from the bowels.

CHLORUM.

Authority. 25, M. Donné, *Lancet*, 1834-5 (2), p. 737, a girl, æt. nineteen years, swallowed a glass of a solution of Chlorine.

Immediately seized with severe vomiting; the tongue became dry and red; she had slight fever, and the epigastrium was somewhat sensitive to touch; the saliva was strongly acid,²⁵.

CHROMICUM ACIDUM.

Authority. 7, H. Wardner, M.D.; *Phil. Med. and Surg. Rep.*, vol. xx, 1869, p. 362, a man, æt. thirty-six years, took a solution containing about 15 grains.

His features contracted, his countenance assumed a leaden hue, and his eyes sank (within three minutes); countenance partially resumed color (after two hours),⁷.—Vomited very profusely; first the contents of the stomach, then a large quantity of bile; and lastly, considerable blood (within three minutes); stomach still irritable (after two hours),⁷.—Great burning pain in stomach (after two hours),⁷.—Two or three copious alvine dejections (in three minutes),⁷.

CHRY SOPHANIC ACID.



An organic acid obtained from Rhubarb and some lichens (*Parmelia*, *Squamaria*, etc.).

Authority. J. Ashburton Thompson, M.D., *Brit. Med. Journ.*, 1877 (1), p. 607.

Deductions from 319 observations; 206 of these were on persons who were out of sorts rather than ill.

The crude powder and the extracted acid have the same locally irritant effects; either kept in contact with the skin produces irritation, inflammation, and discoloration of the cutis. Either introduced in minute quantity to the eye causes conjunctivitis.

On reaching a dose of 6 grains, I experienced sensations of nausea, accompanied and followed by sensations of disturbance in the bowels; even an abortive attempt at vomiting; then relief from all symptoms (after four hours). Sensations of disturbance in the bowels, accompanied and followed the sensations of nausea (after four hours). A loose action of the bowels (after twenty hours).

My brother dined at 7; at 8.30 he took 8 grains of C. made into a pill with confection of roses.

Vomited (after two hours); aroused from sleep by another attack of

vomiting (after three hours and a half). No depression, except during the act of vomiting.

Second series of observations, including 90 cases, 30 children and 60 adults.—Vomiting is always the first sign of action; this is not attended by any depression at all comparable with that caused by tartar emetic or ipecacuanha; in children, as well as in adults, the acts of vomiting varied between none in three out of the whole number and six in two out of the whole number; they were usually two or three, very often only one; the nausea continues more or less markedly until the bowels recover.

The action on the bowels is variable, from none in a few cases to nine or ten in equally few cases; most often the range was between three and seven; there is no griping pain; the motions are very watery, and of such a brown color as suggests its origin with the powder taken; if the vomiting be very early, then the purgation, although marked by a fluid stool or stools, will certainly not be violent; and in some cases, in which there was no vomiting, the bowels acted very freely; it does not always happen so, however, under the same condition; and I conclude, therefore, that some persons can take a larger dose than others.

A dose of six grains produces scarcely any effect upon children of twelve, eleven, ten, or nine years; upon children of eight and six years, the effect is uncertain; upon children of from five years down to five weeks, it is certain to operate; but the time which elapses before its action is manifested may vary between ten minutes and nine, even twelve, hours; the effect of the same quantity is not increased as the age of the child is diminished. (Thus, three children of five weeks, of three years, and of six years, respectively, were affected by the six-grain dose to the same degree.) I am not able to say upon what this peculiarity depends, but the intervention of sleep delays the manifestation of any effect, and was the cause of delay in the two cases in which alone so long intervals as nine and twelve hours elapsed. A scruple is a moderate dose for an adult; the interval which elapses before it begins to operate may be so long as five hours; but, if the dose be well adapted to the individual, that is quite exceptional; four hours is a pretty frequent interval, but two hours or less is the most common interval; it may be so short as fifteen minutes, but is seldom shorter than thirty. I conclude that Chrysarobin is, in a dose of twenty-five grains for adults or of six or more grains for children, an emetic purge, of which the action is unattended by any inconvenient symptoms.

Observations of Chrysophanic acid upon 116 persons, of all ages, and both sexes.—The action of Chrysophanic acid is similar to the action of Chrysarobin, with this difference, that while in a suitable dose each will cause vomiting and purging, if the dose be too small Chrysarobin is most likely to purge alone, while Chrysophanic acid is most likely to cause vomiting only. A larger full dose, that is to say, from fifteen to twenty grains, will always both vomit and purge the patient very freely, at the same time that it causes an inconvenient amount of either of those effects very rarely indeed. Farther, there is but little danger of inconvenience from too large a dose.

The dose of Chrysophanic acid.—In this case, as in that of Chrysarobin, I observe first of all, with a quantity which acts well upon a child of five or six years of age, no increase in effect is observed with the same dose

upon the very youngest children ; yet farther, of Chrysophanic acid I am obliged to say what does not hold good of Chrysarobin, that on children of less than four or five years its action is uncertain, in that it sometimes fails to act entirely, or acts very feebly, or most often of all causes vomiting only ; it never acts upon them with unexpected violence. I have found that six grains of Chrysophanic acid is a good dose for children of ten years and under. For adults, I find the action of the acid certain in a dose of fifteen grains ; upon some adults I have found ten and even eight grains act as often as fifteen grains upon other adults apparently of similar physique ; and again I have found some, but very few, who demand as much as a scruple for the manifestation of a reasonably brisk action.

Of Chrysophanic acid I have observed this effect : whatever the condition of the patient, it causes the evacuation, one way or the other, of large quantities of bile.

Fourth series of observations.—I made ten observations on adults with the resin of Chrysarobin, made into pills with Tragacanth and Glycerin. One grain had no effect upon two individuals ; in three cases three-grain doses caused vomiting from twice to five times, and purging from five to seven times ; in one case, two grains were taken by a man, aged twenty years, instead of four as was intended ; in six hours, the bowels began to act, and then they acted very loosely three or four times ; there was no vomiting, but considerable nausea, which lasted for eighteen hours ; in the remaining four cases, four grains were taken for a dose ; and this in every case acted within two hours, in one within half an hour, vomiting being the first sign, and purging very quickly ensuing ; in three of these cases the acts of vomiting were three to five ; of purging from five to ten ; in the fourth, a stout woman, fairly strong, and the subject of habitual constipation, the vomiting and purging were continued during five or six hours, with very small intervals ; she was suffering from neuralgia, which I had traced to the state of the bowels, and it disappeared during this violent action ; the sickness, except in the last case, was not said to be attended with much depression. It will thus be seen that the resin of Chrysarobin is identical with that of the crude powder and of Chrysophanic acid, but very much more powerful.

If a dose of Chrysophanic acid be taken, and immediately followed by a meal, its action will be considerably delayed ; if it be taken after a meal, its action will be delayed in proportion (more or less) to the progress which has been made with digestion ; if it be taken upon an empty stomach, its action is manifested quickly ; there seems reason to believe that fulness of the stomach, or the consequent delay in action, determines its effects to the bowels, without in all cases obviously diminishing its emetic power ; but emptiness of the stomach does determine it rather to emetic action, and does also diminish its purgative action, notwithstanding that, except in the case of babies, the latter is never entirely absent.

From these 319 cases I conclude that Chrysophanic acid is an emetic purge ; its action is as certain, when given in appropriate dose, as that of any other drug which acts in either of these ways ; if either kind of action should be wanting, on account of the dose having been too small, it is the purging which will fail to appear ; but that is rare.

CICHORIUM.

Authority. 2, J. W. Slater, *Lancet*, 1855 (2), p. 379, effect on a young man from roasting chicory.

Unable to read at night, not from an outward irritation, but, as he phrased it, from a feeling of "deadness" in the eyes.²

CICUTA MACULATA.

Authorities. 4, G. W. Wright, *Bost. Med. Intelligencer*, vol. ii, 1825, p. 171, poisoning of a youth; 5, "W.," *Bos. Med. and Surg. Journ.*, vol. x, 1834, p. 107, a man chewed and swallowed about 15 grains of the green root; 6, Dr. John Stockbridge, *New Eng. Journ. of Med. and Surg.*, vol. iii, p. 334, a boy, æt. fifteen years, ate about 1 drachm of the root; 7, same, a boy, æt. seven years, ate about $\frac{1}{2}$ drachm of root; 8, a boy, æt. five years, ate about the same quantity; 9, G. W. Norman, M.D., *Virginia Med. Month.*, fatal poisoning of a young man, æt. seventeen years, by the root.

Mind.—Delirium (after half an hour).⁵.—[30.] Entirely insensible.⁹

Head.—Began to feel queer about the head (after half an hour).⁵

Eye.—Eyes glassy and wandering.⁴.—Pupils dilated.^{1, 9}.—Pupils were greatly dilated, and did not contract when a candle was presented.⁸.—Pupils dilated and insensible.⁴.—Eyes too sensible to light (after half an hour).⁵

Face.—Countenance pale.⁷.—Deathly paleness, resembling that of a drowned person.⁸.—Jaws locked.⁴

Mouth.—[40.] Frothing at the mouth.⁹

Throat.—Muscles of deglutition spasmodically affected, on presenting any substance to the mouth.⁴

Stomach.—Nausea and vomiting.⁴.—Vomiting.^{5, 6, 8}.—Sick at the stomach (after one hour).⁹.—Vomiting several times.⁷.—Ejections of frothy mucus, mixed with a dark flocculent sediment and blood.⁴.—Every few minutes he complained of a sensation of universal distress, with oppression of the stomach.⁷

Stool.—Inclination to stool.⁶

Respiratory Organs.—Stertorous breathing.⁹

Pulse.—[50.] Pulse hardly perceptible.⁴.—Pulse very feeble, 65.⁷.—Pulse 50 to the minute.⁹.—The pulse was almost, and at times quite imperceptible.⁸.—Pulse before the convulsion 51, and of the ordinary strength, afterwards weak; could not be felt during the convulsion.⁵

Generalities.—Frequent twitching of the muscles of the body and extremities.⁵.—Constant jactitation.⁴.—Antagonizing muscles alternately convulsed, drawing the eyes and angles of the mouth right and left, in quick succession.⁴.—Convulsions.¹.—Violent convulsive fits, with frothing at the mouth, which continued for about an hour and a half, when he died.⁶.—[60.] Convulsion of a decidedly epileptic kind, lasting four or five minutes, marked by frothing at the mouth, distorted, livid countenance, and short spasms of all the muscles (after half an hour).⁵.—Several convulsions at intervals of ten or fifteen minutes.⁹

Sleep.—Inclination to sleep.⁷.—During the intervals of vomiting he lay in a deep sleep.⁸

Fever.—Whole body and extremities cold.⁸.—Extremities cold.⁴

CIMICIFUGA.

Authority. 21, Inaug. Thesis, presented to Hom. Med. Coll. of Penna., 1853, by Franklin Bigelow.

The tincture used in the following provings was made from the dried root gathered in the spring.

First Prover.—Mr. F. B., aged twenty-five years.

September 29th, 1852. Took 25 drops of the tincture at 3 P.M.

At 10 A.M., next day, a dull oppressive headache came on; pain principally in the forehead, extending along over the vertex down to the occiput. In the whole forehead the pain is very severe. On walking out into the open air, pains in the muscles of the lower limbs as from great fatigue; felt more particularly in the anterior parts of the thighs. Great disposition to yawn. Inclined to drowse much. Sleep disturbed by dreams of accidents, seeing limbs broken, great suffering, etc.

On the following morning awoke at 3 o'clock, with severe cutting pains and great uneasiness in the lower part of the abdomen (hypogastric region), with urgent desire to go to stool. Stool very thin and partly undigested. Great uneasiness in the bowels all the forenoon, without much desire to go to stool, but a sensation as though I should be obliged to soon. Next morning awoke at 3 o'clock, with diarrhœa of thin undigested character. Pain low down in the bowels. Diarrhœa continued through the day; stools once in four or five hours.

Next day no perceptible symptoms remained except a feeling of weakness and languor.

Second Proving.—October 7th, 11 A.M. Took 100 drops of the 1st atten. (5 to 95). Great nausea and disposition to vomit for two hours after taking it. Very sleepy during the forepart of the evening. Slept well till 3 o'clock in the morning; very restless the remainder of the night.

October 8th. At 6 A.M., dull oppressive headache came on, extending from the forehead over the vertex to the occiput; violent pain in the whole forehead; pain *dull*, with a sense of heaviness. Great dizziness. Constant disposition to yawn. Occasional shooting pains about the sides of the head, in the region of ideality and sublimity. Pulse rather accelerated. Feeling of great prostration of whole system. Appetite poor. Limbs feel excessively fatigued. Forehead dry and hot. Pains in head partially relieved by throwing head backward. At times very chilly over the entire body. Continually stretching and yawning. Great uneasiness and oppression in the epigastrium. Stomach feels greatly oppressed. On attempting to read immediately go to sleep. Disposed to get angry easily. Rather melancholy. Symptoms nearly all subsided by 2 P.M. In the evening great pain in lower part of bowels, with great fulness of the abdomen. Sensation as though diarrhœa would come on. Very bitter and disagreeable taste in mouth. Very drowsy and sleepy. Slept well till 3 A.M., after that time very restless. This symptom appeared regularly every morning for two weeks.

Second, third, and fourth days after 3 A.M., each day, pain in lower part of bowels, with diarrhœa of a thin, undigested character, lightish-colored. Pains in the head grew less and less severe for three or four days, and gradually subsided by the fifth. Upper lip very much swollen and inflamed for eight days. Skin cracked and came off. A small ulcer on each cheek, near the centre; very much inflamed for several days, bleed-

ing almost constantly. Eruption, on the hands and wrists principally, resembling mosquito-bites.

Second Prover.—Mr. E. H. B., aged twenty-four years.

September 29th, 1852. Took 20 drops of the tincture at 9 A.M.. One hour after, fluent coryza with violent tickling in the nares, which excited sneezing, going off in about half an hour. Great drowsiness after dinner. Weakness of the knee-joints, preceded by unnatural warmth in the feet. Weakness in the lower limbs. When walking, have to proceed with great cautiousness for fear of falling. *General feeling of intoxication.* Dull, heavy rheumatic pains in the upper posterior region of the neck. Tearing in the centre of the vertex, in a spot about the size of a silver dollar. Jerking in the muscles of the left thigh, more particularly in the region of the inferior third. Cold feeling of the left thigh and knee, as though a cold breeze were blowing on them. Stitching pain as of fine needles in the region of the heart, accompanied with slight twitching or pulsation in the external muscles of that region. Slight palpitation of the heart. Sleep imperfect; waking at midnight. General burning and itching of the skin after rising in the morning, continuing half an hour.

Third Prover.—Mr. E. P. C., aged eighteen years.

September 29th. Took 20 drops of the tincture at 10 A.M. Soon after taking it, burning in the stomach and excessively bitter taste in the mouth. Half an hour after, felt a sensation of rawness in the throat, as from exco-riation. One hour after, dull pain in the forehead and ears.

Third day, early in the morning, pain in the bowels, with thin, light-brown diarrhoea, which came on in like manner for three or four days. Eruption on the skin like mosquito-bites,²¹

CINA.

Authorities. **14**, Mauthner, Journ. Kinderkrankheiten, 22, 1854, p. 1, a boy, aged six years, took 1½ drachms; **15**, M. Caravasse, Bost. Med. and Surg. Journ., vol. lxx, 1862, p. 126 (London Lancet), a nervous woman, believing that she suffered from worms, took a drachm of wormseed, semen contra; **16**, Drs. Burdick and Lilienthal, N. A. J. of Hom., 14, 139 (Hom. World, vol. xii, 1877, 444), fatal case of poisoning with *Santonin* lozenges, in a girl, aged five years; she took about 6 grains in divided doses.

Mind.—Consciousness clear when awake, but during her restless sleep delirious.¹⁶

Eye.—Chancing to look in the glass, she distinctly saw herself pea-green.¹⁵—Complains of seeing things yellow.¹⁶

Mouth.—Tongue deep red, without coating.¹⁶

Stomach.—Continual thirst for ice-water, which she swallowed greedily.¹⁶—Vomiting of yellowish slimy mucus set in at 11 P.M., and continued till forenoon; purging of watery, flaky, foul-smelling stools every ten to fifteen minutes. Abdomen very sensitive, the child complaining of a dull pain in the pit of the stomach. In the evening we found the abdomen somewhat tumid, but soft.¹⁶

Abdomen.—Colic (soon).¹⁵

Urinary Organs.—Urine saffron-yellow, containing flakes of mucus.¹⁴—[330.] Urine orange-colored.¹⁶

Respiratory Organs.—Breath quick and catching,¹⁶.—Coughed incessantly the whole night (first night),¹⁶.

Pulse.—At 9 P.M., the pulse of the left side was gone; on the right side thready and soft (second day),¹⁶.

Generalities.—Slight twitchings of facial muscles. After midnight severe convulsions set in, more like tetanus; throwing the head backwards, eyes rolling about, countenance distorted, body sometimes nearly curved, with legs turned back. At intervals grasping at everything; gnawing of fingers. Burning pains apparently torment her, as she forces everything in her mouth. After four convulsions she died about 2 A.M. (second night),¹⁶.—Very restless; throws herself about with her whole body from one side to the other,¹⁶.—Collapsed, the face pinched, extremities rather cold, great restlessness, drawing up of lips over the teeth, with pinched expression of mouth and nose,¹⁶.

Fever.—Hot perspiration on occiput; clammy in forehead. The icy-cold clammy perspiration crept steadily upwards,¹⁶.

CINNAMOMUM.

Authority. 2, C. G. Mitscherlich, Pharm. Journ., vol. ix, 1849, p. 233, effects of large doses.

Diarrhœa.².—Increased secretion of urine,².—Excite the vascular system and the respiratory organs,².

CITRIC ACID.

Authority. W. Stevens, On the Blood, p. 451.

During a residence of twenty years in the West Indies I have only seen one case of scurvy, and *that case was decidedly brought on by the excessive use of Citric acid, which an American gentleman had been recommended to use as a preventive against the yellow fever.*

CITRUS LIMONUM.

Authority. 3, G. O. Rees, experiments on a healthy man with 1 ounce lemon-juice, three times daily for three days (Treatment of Rheumatic Diseases by Lemon-juice, pp. 32-37), Edinb. Med. and Sur. Journ., vol. i, 1850, p. 241.

[10.] Pulse naturally full, and 75 in the minute. After five doses it became much weaker and more compressible, and numbered 70 in the minute; conditions accompanied by a feeling of general depression. Pulse 66, and very small and compressible (third day). Feeling of general depression (with weaker pulse). Urine always acid, and also natural in quantity till the third day, when it increased somewhat; the sp. gr. was then 1017, with a deficiency in lithic acid,³.

COCA.

Symptom 364, in vol. iii, copied from Hering's Monograph, begins with "On washing;" in North. Amer. Journ. of Hom., New Series, vol. v, p. 179, first line, it is "On waking."

Authorities. 45, Alex. Cochet, Journ. de Chim. Med. (Amer. Journ. of

Pharm., 1833-4), p. 58, effects of chewing, on the Indians of Peru: (46 to 50, Berridge's Collections, Appendix to Brit. Journ. of Hom., general effects); **46**, Dr. Martius, from Gauger's Repert., 1842, p. 452 (Pharm. Journ., 1843, vol. ii, p. 660); **47**, Prof. Schlechtendal, from Encyclopædia of Med. Sci. and Archiv. der Pharm., 1853 (Pharm. Journ., vol. xiii, p. 224); **48**, Schroff, from Wien. Wechnbl., vol. xviii, and Schmidt, vol. cxvi, p. 297 (New Sydenham Soc. Pub., vol. xix, p. 453), experiments with Cocaine, its acetate and chloride, and an alcoholic extract of the leaves; **49**, Rossi, Roman Correspond. Sci. (Lancet, 1866 (2), p. 195); **50**, Practitioner, 1868, vol. i, p. 233, Review of Recherches Chim. et Phys. sur l'Erythroxyllum Coca du Perou et la Cocaine, by Thomas Moreno y Mais, Paris, 1868; (51 to 55, Edward Lippman, Thèse Etude sur la Coca du Perou, Strasbourg, 1868); **51**, effects of hot infusions of 1 to 15 grams to 60 of water; **52**, effects of 30 grams; **53**, extract of 2 grams; **54**, obs. of Rossier, effects of chewing 1 to 3 grams of the leaves; **55**, Mr. Reis, chewed the leaves; **56**, l'Union, No. 91 (New Sydenham Soc. Pub., vol. xix, 455), (Berridge), effects of leaves; **57**, Scrivener, Med. Times and Gaz., 107 (2), p. 407, effects on chewers; **58**, Berridge, North. Amer. Journ. of Hom., New Series, vol. v. 1874, p. 165, Dr. David Wilson, inhaled the vapor while potentizing about 3.30 p.m.; **59**, E. B. Shottleworth, Can. Pharm. Journ., Aug., 1877 (Pharm. Journ. and Trans., vol. viii, 1877, p. 221), effects on the Toronto Lacrosse Club.

Mind.—Its effect is to deaden sensation and produce even madness,⁴⁶.—In large quantities the chewing of leaves induces a state of intoxication, like that of Cannabis,⁵⁶.—Animation and content,⁵⁷.—When chewed in large quantities, the Coca causes a kind of intoxication and loss of sleep,⁴⁸.—The head felt agreeably light, the ideas flowed with facility, and fantastic images followed each other in rapid succession; this was soon succeeded by extreme drowsiness, in resisting which there was great oppression of the head and confusion of thought. If he had given way to it the prover felt he would have passed into an agreeable dream life, like that produced by Cannabis. The effect of the drug varies according to the intensity of the effort made to resist it. As soon as the interference with consciousness ceases, and the relation between the mind and the external world is re-established, all the other functions return to their normal state,⁴⁶.

Head.—Heaviness of the head,⁵².—Always after chewing the leaves sleep was quiet, but the next morning there was frontal headache, which lasted a part of the day; at the same time the tongue became coated and the appetite impaired,⁵⁴.

Eye.—Eyes brilliant,⁵⁷.—[520.] After large doses of the decoction, there is dilatation of the pupils, and physical mental calm,⁵⁴.

Ear.—In half an hour, distant ringing booms through head, repeated twice, once in evening, lasting a few seconds,⁵⁸.

Nose.—About midnight, on going to bed, nose felt swollen and stuffed, like an incipient catarrh (first day),⁵⁶.

Face.—Countenance more animated,⁵⁷.—Paleness of lips,⁵⁷.—Slight yellow tinge about angles of mouth,⁵⁷.

Mouth.—Teeth stained bright yellow,⁵⁷.—It increases the secretion of saliva, produces a sensation of warmth and fulness in the mouth and stomach, and stills hunger,⁴⁷.—Diminished saliva,⁵⁴.

Throat.—Some dryness of the throat,⁵⁴.—[530.] Heat and dryness of the throat,⁵¹.

Stomach.—It enables the workmen to endure prolonged abstinence,⁵⁶.

—Men may live in robust health several days without food. Rossi, after taking a decoction of the leaves, felt neither hunger nor thirst for forty-eight hours,⁴⁹.—They appear as if they had partaken of a rich repast,⁵⁷.—An agreeable heat; a sensation of comfort in the epigastrium, somewhat like that produced by a glass of wine, radiating from the stomach over the whole body,⁵⁴.

Respiratory Organs.—Enables them to ascend heights without dyspnoea,⁵⁶.

Pulse.—Pulse strong and frequent,⁵⁷.—The pulse from the first gained in frequency and strength, while the breathing lost in frequency, but became deeper and fuller,⁴⁸.—Pulse 59 (before taking); 63 (after five minutes); 56 (after fifteen minutes); 61 (after forty-five minutes),⁵³.

Superior Extremities.—A warm indistinct pain in left shoulder-joint, for a few minutes, at 12.30 P.M. (second day),⁵⁸.

Generalities.—[540.] Tetanic convulsions, hyperæsthesia, dilated pupils, and diminution of movements from loss of co-ordination,⁵⁰.—Abuse of Coca causes signs of premature old age, unsteady step, yellow skin, want of brilliancy of eye, and general indifference or apathy,⁵⁷.—General symptoms like those produced by a small quantity of alcohol, a slight disturbance of vision, slight increase in the frequency of the pulse; cold infusions produced the same effects,⁵¹.—Sustains the strength,⁵⁶.—Desire for physical exertion,⁵⁷.—Great feeling of comfort,⁴⁸.—More agility in walking,⁵⁷.—Increases the bodily activity,⁴⁷.—The effects of small doses seems to be to resist fatigue, which I frequently noticed in long walks,⁵⁴.—When provided with Coca, they (the Peruvians) can make rapid journeys, without suffering in their respiration, and can take unremitted exercise without being worn out by fatigue. They have been known when acting as guides, to travel twelve or fourteen leagues without stopping, and to perform this as rapidly as the best mounted horseman. This arises from the circumstance, that in these elevated regions, horses soon suffer in their wind, and hence gradually relax their speed; whilst, on the contrary, the Indians, by constantly using the Coca, do not thus suffer, and always keep the interior of their mouth in a moist state. The inhabitants of the country support all kinds of fatigue, for two or three days, without any other stimulant than the Coca,⁴⁵.—[550.] At the commencement of the match, about 1 drachm to 1½ drachms of the leaves was served out to each man. This was chewed, in small portions, during the game, the saliva being swallowed. On first taking the leaves, a sensation of heat and dryness was produced in the throat. This was relieved by washing out the mouth, or gargling with water, after which the desire for water was no greater than usual. Soon after a sensible augmentation of force, and a general feeling of invigoration were realized, and continued to be felt throughout the game, so that fatigue was wholly, or in great part resisted. The pulse was observed to increase in frequency, perspiration was augmented, but no mental effect was noticed, save the exhilaration of spirits always attendant on the exercise of well-strung muscles and on the excitement of play,⁵⁹.—Torpor,⁵².—General feebleness,⁵².—It produces, in large quantities, lassitude and drowsiness,⁴⁷.—The first effects are succeeded by a profound calm, a kind of paresis, during which one does not wish to use the faculties, and is overpowered by indolence,⁴⁹.

Skin.—While writing a long letter, about 8 or 9 P.M., felt in left groin and region of abdominal ring as if the skin were sore and smarting; it felt a little tender to touch. (Here he formerly had an extensive glandular suppuration several years ago, from cold and fever), (first day),⁵⁶.

Sleep.—Slept remarkably well last night; dreaming that something was adhering to fauces at posterior entrance to nares which he was trying to detach; woke about 8 A.M., actually in the effort, and there really was mucus there to detach; still has the smarting soreness (second day),⁵⁸.

Fever.—Increase of subjective warmth,⁴⁸.—Coldness of the extremities,⁴⁷.—General perspiration,⁴⁷.—[560.] Cutaneous secretion rather diminished,⁵⁰.

CODEINUM.

Authority. 11, C. Ambrosoli (Gaz. Lombardo, 1875), Brit. and For. Med. Chir. Rev., 1876, p. 235, poisoning of a child, aged two years.

Face pale, extremities cold, pulse small, abdomen distended with flatus, eyes glassy and immovable,¹¹.

COFFEA TOSTA.

Authority. 9, Dr. Curschmann (Deutsche Klinik, No. 41), Med. Times and Gaz., 1873 (2), p. 584, additional symptoms; 17, Dr. Eustradiadis, Etude Exper. sur les Prop. Phys. de la Cafeine et du Cafe, Paris, 1870.

Mind.—She recognized those about her, and was aware of the cause of her sufferings, but still her sensorium was evidently not quite clear; and next day she retained only a very obscure recollection of what had occurred. Plain or connected answers were not obtainable from her, and only after much effort and persuasion would her attention be engaged at all, she continuing to incessantly repeat the same phrases in the most dolorous tone,⁹.

Eye.—The pupils somewhat enlarged, acted normally,⁹.

Stool.—In one hour severe diarrhœa, which continued to recur about every half hour for long afterwards,⁹.

Urinary Organs.—Frequent desire to pass urine, which came on every quarter of an hour. The urine having a specific gravity of 1014, was considerably increased in quantity,⁹.—The general conclusions were that there was great diminution of urea, over 15 per cent. Coffea did not prove a diuretic, though there was increased frequency of micturition,¹⁷.

Respiratory Organs.—Respiration painful, short, and rapid, counting from 24 to 30,⁹.—Complained of want of air, and a sensation as if her chest were compressed, and clung convulsively to articles of furniture or the persons near her, but sinking down again quite powerless,⁹.

Heart and Pulse.—[160.] Distressing palpitation, and the impulse seemed almost to raise the chest,⁹.—Pulse 112,⁹.

Extremities.—The limbs, and especially the hands were affected by chorealike movements; so that the patient was unable to hold either a glass or spoon,⁹.

Generalities.—Restlessness,⁹.

Fever.—The forehead was cold, and the temperature of the other parts of the body did not seemed raised,⁹.

COFFEINUM.

Authority. 5, Dr. Kelp, Memorab., 22, 1877 (S. J., 176, 220), a woman took two powders of the citrate, each containing 0.24 gram.

She was seized with remarkable restlessness and dizziness, and could not keep erect. Violent præcordial anxiety, palpitation. Abdominal pulsation. Violent trembling of all the extremities. Grating of the teeth. Features expressive of the greatest anxiety. Feeling of constriction of the neck and throat, recurring periodically every fifteen minutes. Pulse very rapid. This condition lasted three hours, and gradually disappeared.⁵

COLCHICUM.

Authorities. **86**, J. Y. Clark, M.D., Am. Med. Rec., vol. i, 1818, p. 369, John R. Peckworth took 100 drops of tincture; **87**, *ibid.*, the author took 100 drops; **88**, Thos. Kennard, M.D., Am. J. of M. S., 1857 (1), p. 69, a woman, æt. fifty-six years, took one ounce of Colch. wine in twelve hours; **89**, Dr. Fifield, Bost. Med. and Surg. Journ., vol. lvi, 1857, p. 78, a man, æt. twenty-eight years, suffering from rheumatism, took half an ounce of Colch. wine; **90**, W. A. Hammond, M.D., Am. Med. Monthly, Feb., 1861, p. 83, took 1 fluid drachm at 8 A.M., 2 and 10 P.M. (first day); 1½ fluid drachms three times (second and third days); ½ drachm (fourth day); 1½ drachms (fifth day); **91**, *ibid.*, a man, æt. twenty-three years, took 1 drachm tincture three times (first day); 1½ drachms three times (second day); **92**, John H. Garner, M.D., Canada Lancet, vol. iii, 1871, p. 307, R. H. drank about a pint of tincture; **93**, *ibid.*, J. M. J. took same quantity; **94**, *ibid.*, T. H. took a small quantity; **95**, W. E. Porter, Med. Times and Gaz., 1874 (2), 723, poisoning of two children, æt. four and two years; **96**, Canada Pharm. Journ. (Pacif. M. and S. Journ., April, 1874, p. 572), a party of seventeen persons drank from one or two ounces to a pint each, of the wine, seven died; **97**, J. Pierre, Comptes Rendus, vol. lxxix, p. 633 (Pharm. Journ. and Trans., Oct., 1864, p. 325), the author plucked some fully expanded flowers, afterwards extended his hand over a large clump of flowers, carefully avoiding all contact, with the same result.

Mind.—Muttered and raved wildly at times, but it only lasted a few minutes.⁹³—Comatose.⁹²

Head.—[1190.] Intense headache.⁹²

Eye.—Eyes red and watery, and the pupils dilated.⁹²

Ear.—Much tinnitus aurium.⁹²

Face.—Expression of countenance anxious and haggard.⁹²—Hectic flush occasionally on cheek-bones.⁹²

Mouth.—Tonguedry and brown in the centre, and red along the edges.⁹²

Stomach.—Great thirst,^{92 95}.—Nausea.⁹⁴.—Sickness.⁹⁵—Vomiting in from three-fourths of an hour to an hour and a half.⁹⁶.—[1200.] The ejecta were bilious, and then of the rice-water character.⁹⁶

Abdomen.—Extreme tenderness over abdomen, and the intermittent severe pains precisely similar to peritonitis.⁹².—Tormina.⁹⁵

Rectum and Anus.—Tenesmus.⁹⁵

Stool.—Purging.⁹⁶.—Severe diarrhœa (second day).⁹¹.—Purged and vomited violently.⁹².—Purging in from three-fourths of an hour to an hour and a half, when a large quantity was taken; later when the quantity was small.⁹⁶

Urinary Organs.—In three days immediately preceding commencement of experiment, the average quantity of urine for each day was 1425 cubic cent. of sp. gr. 1021.73. The average amount of solid matter was 64.28 grams; of which 30.18 were inorganic, and 34.10 organic substance. The

average amount of uric acid excreted for each period of twenty-four hours was 0.77 grams. Quantity of urine excreted 1685 cubic cent., sp. gr. 1021.5; total amount of solids 70.15 grams, of which 30.90 were inorganic, and 39.25 organic matter; quantity of uric acid 0.81 gram (first day). Quantity of urine 1720 cc., sp. gr. 1020.87; total solids 75.29 grams; inorganic solids 32.44 grams; organic solids 42.85 grams; uric acid 0.69 grams (second day). Quantity of urine 1784 cc.; sp. gr. 1022.57; total solids 80.13 grams; inorganic salts 35.11 grams; organic solids 45.03 grams; uric acid 0.82 gram (third day). Quantity of urine 1540 cc.; sp. gr. 1023.17; total solids 69.23 grams, inorganic solids 31.09; organic solids 38.14; uric acid 0.78 gram (fourth day). Quantity of urine 1698 cc.; sp. gr. 1023.68; total solids 76.14 grams; inorganic solids 32.36 grams; organic solids 42.88 grams; uric acid 0.76 gram (fifth day).⁹⁰—Average daily quantity of urine 989 cc.; sp. gr. 1020.14; total solids 51.20 grams; inorganic solids 22.45 grams; organic solids 28.75 grams; uric acid 0.47 gram (before experiment); quantity of urine 1021 cc.; sp. gr. 1024.18; total solids 63.25 grams; inorganic solids 23.57 grams; organic solids 40.68 grams; uric acid 0.59 gram (first day); quantity of urine 875 cc.; sp. gr. 1026.11; total solids 30.25 grams; inorganic solids 20.38 grams; organic solids 39.87 grams; uric acid 0.51 gram (second day).⁹¹

Respiratory Organs.—[1210.] Coughed severely at regular intervals.⁹²—Blood in sputa.⁹²—Breathing rapid; heavy, almost stertorous (after a few hours).⁹²

Chest.—Great fulness of the chest.⁹²

Pulse.—Pulse 80 (before experiment); 78 (in five and ten minutes); 76 (in fifteen and twenty minutes); 78 (in twenty-five and thirty minutes); 80 (in thirty-five, forty, and forty-five minutes); 78 (in fifty minutes); 76 (in fifty-five minutes); 72 (in sixty minutes); 70 (in sixty-five minutes); 68 (in seventy and seventy-five minutes); 72 (in eighty and ninety-five minutes); 70 (in one hundred minutes); 72 (in one hundred and five, one hundred and ten, and one hundred and fifteen minutes); 76 (in one hundred and twenty minutes); 80 (in one hundred and eighty and two hundred and forty minutes).⁹⁶—In five minutes after taking the medicine, his pulse became considerably reduced, both in force and frequency; in thirty-five minutes he had a copious discharge of pale-colored urine, his pulse much increased; in fifty minutes, very sleepy, pulse again reduced; in seventy minutes, his mental faculties became much exhilarated, pulse very slow and soft; in ninety minutes, perfectly free from any peculiar feelings, pulse somewhat increased; in one hundred and eighty minutes, pulse very natural.⁹⁶—Pulse 70 (before experiment); 52 (in five minutes); 48 (in ten minutes); 46 (in fifteen minutes); 42 (in twenty and twenty-five minutes); 48 (in thirty minutes); 43 (in thirty-five minutes); 45 (in forty and forty-five minutes); 39 (in fifty minutes); 43 (in fifty-five minutes); 46 (in sixty minutes); 50 (in sixty-five, seventy, and seventy-five minutes); 45 (in eighty, eighty-five, and ninety minutes); 47 (in ninety-five minutes); 50 (in one hundred, one hundred and five, one hundred and ten, one hundred and fifteen, one hundred and twenty, and one hundred and twenty-five minutes); 53 (in one hundred and thirty minutes); 55 (in one hundred and thirty-five minutes); 57 (in one hundred and forty minutes); 60 (in one hundred and forty-five, one hundred and fifty, one hundred and fifty-five, one hundred and sixty, and one hundred and sixty-five minutes); 65 (in two hundred minutes); 70 (in two hundred and seventy-five and three hundred minutes).⁹⁷—In five minutes after taking the med-

icine my pulse became diminished, both in force and frequency; in fifteen minutes I felt considerable flushes of heat passing over my face, and followed by a considerable degree of vertigo; in fifty minutes, my pulse became still more diminished; in sixty-five minutes, I was somewhat sleepy; and in seventy-five minutes, I was very sleepy, attended with a slight diaphoresis; in one hundred and thirty minutes, my pulse began to increase in frequency, but continued diminished in force; and in two hundred and thirty-five minutes, was natural, both as to force and frequency,⁶⁷.—Pulse 160; grew feeble (after a few hours),⁹².

Superior Extremities.—Numbness in the arms,⁹⁷.—[1220.] In a few seconds his fingers changed color, and took the livid greenish tint characteristic of a corpse in a state of incipient decomposition. After about ten seconds the skin regained its color,⁹⁷.—Cramps of the fingers,⁹⁶.

Generalities.—Convulsions,⁹⁵.—Extreme prostration, suffering from excessive nausea and vomiting, with slight purging, heat and burning in the fauces, inordinate thirst, cold, clammy skin, feeble pulse, violent supra-orbital pain, and distressing gastralgia, with very anxious countenance,⁸⁸.—Pale, cold, vomiting constantly, purging, and complaining of great thirst and pain at the epigastrium,⁸⁹.—The symptoms were mainly those of violent cholera morbus,⁹⁶.—Debility,⁹¹.—Very much exhausted,⁹².—Similar symptoms, but milder, except the headache, which he described as most intense,⁹³.

Sleep.—Insomnia,⁹⁶.

Fever.—[1230.] Shivering,⁹⁵.—Coldness,⁹⁵.—Whole body clammy and cold,⁹².—Feet and hands cold,⁹².—Cold sweat on forehead,⁹².

COLLINSONIA.

Authority. 2, M. M. Dowle, M.D., U. S. Med. Invest., N. S., 3, 1876, p. 386, took a teaspoonful and half of the powder.

After about half an hour, while partaking of warm mashed potatoes and hot sweetened milk, at supper, I first experienced a warmth in my lips, and simultaneously a tensive, pressive headache at the point of emergence of the supra-orbital nerve of the left side. Pressed with thumb over the spot to relieve the aching. Presently, say perhaps ten minutes later, headache was no longer noticed, only an increasing warmth spreading along the internal mucous surfaces of the upper and lower lips; the sense of warmth was deepening rapidly into a feeling of largeness of the parts, attended with a sensation as if the parts were occupied with innumerable needles, which were darting back and forth.

The face, as the cheeks, the forehead, and also all the hairy parts of the under chin, from ear to ear, and thence reflected down almost to breast-bone, seemed to feel the same numbness or needlelike darting to-and-fro sensation. Strangely enough, the tongue did not share the same sensations. (There was a *caustic* sensation in the fauces, which induced some coughing and spitting when the powder was first swallowed, but there was no universal burning in the throat-pit or gullet at any time afterwards.) While the inner surface of the lips, as well as the whole buccal mucous cavity were experiencing an intensity of excitement, the face seemed to grow broader and broader, making the prover feel, in humorous phrase, as if he had a touch of the "big-head." The mind partook of the sense of pleasurable exhilaration.

Next, the entire right forearm, from the elbow to the tips of all the fingers, felt the sense of numbness, a weary heaviness; then the left arm and its fingers. The balls of the two thumbs were very numb; they were worse than the fingers. Rested my head at supper-table on my left hand. Felt a sense of nausea, and thought I must vomit. No better in the open air. Lips seemed growing larger all the while, and mouth seemed to stand open like a huge catfish's; lips dry; no flow of saliva at any time during the proving.

Lay down on bed with coat and boots off, with a blanket as covering; lay there from five to ten minutes; mouth tingling and burning; lips "enlarging;" face flushing and pricking, and whole head seeming to take on "growing" dimensions; both arms, from elbows to finger-tips, "fast asleep," and hands feeling as broad and heavy again as they naturally were. Wanted to lie with head high, to get more air; suddenly, low down in left lung, felt a gurgling, followed by an immediate desire to cough, which I restrained, because just three weeks from this date the prover had a slight attack of hæmoptysis coming from that side, which was checked with *Trillin*. Uneasy; got up in stocking-feet and shirt-sleeves, and sat near stove. Was, if possible, growing worse. Head seemed to grow bigger while straining to get boots on; went to front door, and staggered against the large elm tree near the step. While closing shutters felt sick and faint, and re-entered house. At no time did there seem to be any striking departure from a natural breathing; the breathing and pulse *did* vary, however, while lying down; the pulse under the finger would withdraw like a thread, and then return with more volume. This condition of my pulse was noticed while lying on my left side, recently affected as stated, and I got up to avoid, if possible, a return of that trouble. Hot things taken into the mouth and swallowed, seemed at all times to intensify the effects of the medicine. Had I taken the medicine by mistake in the dark, I would have compared the sensations experienced to those of *Aconite*; it seems the analogue of *Arum triphyllum* also. To antidote the *Collinsonia* action I employed *Chloride of sodium*; the spirits of Camphor containing Laudanum was used by olfaction, but the mucous membrane of the nostrils, as far within as this volatile stimulant penetrated, seemed only to resent its presence by inducing an unwelcome aggravation of the existing local troubles. *Nux vom.* was the antidote. The face returned to a feeling of naturalness with each dose; the *Collinsonia* effects seemed to pass away like a vapor or aura from above downwards; it was *felt* to move; the sensations of relief being first felt in the forehead; then the cheeks lost their grotesque unbecomingness, or largeness; next the lips parted with their pungent glow, while the two arms, down to their finger-tips, were next severally alike bettered. However, the balls of the thumbs persisted in their numbness, the right feeling somewhat unnatural even the next day. To restore the thumbs and fingers to their right feeling, I slapped my outspread hands at the time across and around my sides, as the wood-chopper does when his hands are numb with cold.

These toxic sensations lasted fully three hours, say from 6 to 9 P.M. Feeling "well" at this latter hour, I visited a lady patient, a block from my dwelling. In the cool, open air, walking, my feet and limbs felt strangely light, like a deer's, and as though I could run very fast if chased. I seemed to lose the feeling of physical or personal identity, as far as the lower extremities were concerned. Returning home, after an absence of perhaps ten minutes, I now felt for the first time a strong glow in the

bowels, from the umbilicus clear down to the toes. A sense of increasing largeness and numbness was felt from hip to hip; while the right thigh was thus affected, the left was skipped; the calves of both legs seemed elephantine, and "fast asleep." I sat still and sipped *Nux vom.* The dynamic antidotal effect which this agent has over the Collinsonia poison in the system was decided, and it was felt to be like removing a swaddling-cloth that embarrassed nervous action by its tightness and weight. I took a teaspoonful of a solution of twenty drops of the 1st attenuation of *Nux vom.* in twenty teaspoonfuls of water, every few minutes. Urinated several times, and had a stool during proving, the latter being in the form of balls, or lumpy agglomeration.²

COLOCYNTHINUM.

Authority. 56, Henry Usher. The Organon, vol. i, Jan. 1878, p. 104, effects of 6th dec. in three doses.

Dark redness and painfulness of the frænum penis; it ceased after a while.⁵⁶

COMOCLADIA.

Revision of authorities, by Dr. J. Hyde, Am. Observer, xiii, p. 629.

No. 1, Dr. J. Hyde, proving, 1854, with a drop of the $\frac{1}{1000}$ th dil.; 2, Miss J., 4, afterwards 3 drops; 3, Mr. G. took pellets saturated with the $\frac{1}{1000}$ th; 4, same; . . . 8, provings by Dr. J. Hyde, Am. Obs., xiii, 593, 10 drops in water at 10.30 A.M. and 12.30 P.M., 20 drops at 4.30 P.M.; 8a, same, 10 drops at 6.30 A.M. (first day), same at 6.10 A.M. (second day), 25 drops at 6.30 A.M. (third day), 40 drops at 4.10 P.M. (seventh day); 8b, 3 drops at 5.30 P.M. and 11 P.M. (first day), 3 drops at 7.30 A.M. and 1 P.M., 4 drops at 4.45 P.M. and 9.50 P.M. (second day), 8 drops at 12 M. and 2.20 P.M. (third day); 8c, same, 10 drops at 3 and 10.55 P.M. (first day), same at 7.4 A.M. and 3.30 P.M. (second day), put 2 ounces of cold water and 10 drops of 1st dec. into Fullgraff's inhaler, and inhaled for twenty minutes, at 11.45 A.M. and 3.30 and 10.30 P.M. (tenth day); inhaled twenty minutes at 2.30, 5, and 10.25 P.M. (fourteenth day); inhaled twenty minutes at 2.30 P.M.; took 8 drops at 10.55 P.M. (fifteenth day), 12 drops at 4.35 P.M. (sixteenth day).

Mind.—A cheerful condition of mind during the forenoon (first day).^{5a}

Head.—[190.] While inhaling at 10.25 P.M., aching in the os frontis and orbital bones (fourteenth day).^{5c}—Dull aching in the forehead, and on moving the head a sense of fullness, rigidity, and lameness of the muscles of the neck, in the afternoon (sixteenth day).^{5c}—Pain above the left eyebrow, at 4.12 P.M. (second day).^{5c}—11.30 P.M., while lying on the right side, an aching in the right temple, followed by an aching and sense of fullness in the right side of the face (second day).^{5b}—Aching in the right temple and right orbital bones, at 6 P.M. (second day).^{5c}—2.35 P.M., a sharp pain passing down the right temporal ridge and external angular process. Immediately after a sharp pain at the right supraorbital ridge, close to the supraorbital notch (fourth day).^{5c}—4 P.M., aching in the right temporal bone, commencing in the temporal ridge and extending to the occiput; the

whole base of the head is very painful on moving the head, also the sternomastoideus and trapezius muscles (twelfth day),^{8c}.

Eye.—The Meibomian glands of the upper lid of the right eye are inflamed (fourteenth and fifteenth days); inflammation subsided (eighteenth day),^{8c}.

Ear.—Heat and fulness in the interior of the right ear, at 1 P.M. (third day),^{8b}.

Face.—5.10 P.M., after slight exercise in the open air, and while in my room, an aching in the left maxillary articulation, leaving a sense of fulness; immediately after an aching in right maxillary articulation, terminating in a sharp pain (nineteenth day),^{8c}.—[200.] 5.22 P.M., after a short walk in the open air, and having entered a warm room, an aching in the right maxillary articulation, involving the whole of the right side of head (nineteenth day),^{8c}.—9 A.M., an aching in the ramus of the right maxilla (seventeenth day),^{8c}.—10.30 P.M., aching at the base of the right antrum of Highmore, then at the base of the left antrum (tenth day),^{8c}.—10 A.M., while at rest in my office, heat and sense of fulness in the face, over the superior maxillary bone (first day),^{8a}.—10 A.M., while at rest in my office, a sensation as of a pimple over the right antrum (first day),^{8a}.—9.15 A.M., sensation as of a scabby eruption on the median line of the lower lip, close to the vermilion border (third day),^{8a}.—10 A.M., while at rest in my office, a corrosive burning on the left side of the lower lip (second day),^{8a}.

Mouth.—5.30 P.M., aching in the upper molar teeth and gum of the right side, aggravated by cold air (second day),^{8b}.—1 P.M., immediately after dinner, an aching in the body of the last molar tooth of the right side of the lower jaw (third day),^{8b}.—At 3 P.M., while sitting in my office reading, an aching in the lower incisors, passing to the right cuspid and bicuspids teeth, continuing five minutes (first day),^{8a}.—[210.] 4.30 P.M., aching in the lower incisors, which leaves them very sensitive to pressure from the upper teeth (third day),^{8a}.—5.30 P.M., while at rest in a warm room, a sore aching of the gum of the right upper molar teeth (nineteenth day),^{8c}.—A short, cutting pain in the gum of the first lower molar tooth of the left side, at 1 P.M. (third day),^{8b}.

Throat.—3.30 P.M., while at rest, a sense of expansion in the œsophagus, as of air ascending slowly from the stomach (third day),^{8a}.

Stomach.—Appetite for dinner less than usual (first day),^{8a}.—No appetite for dinner (first day),^{8a}.—An acrid, rancid sensation while walking in the open air, at 3.30 P.M.,^{8a}.—11 A.M., an eructation of tasteless air (first day),^{8a}.—10.15 A.M., while at rest, an eructation of air tasting of the drug (first day),^{8a}.—4.30 P.M., eructation of tasteless air (third day),^{8a}.—[220.] An eructation of sour, acrid water, at 2.5 P.M. (tenth day),^{8a}.—10.10 A.M., after a walk in the open air and soon after entering my office, an intense acrid eructation, producing momentary strangulation (twelfth day),^{8c}.—Hicoughed several times, at 3 P.M.; immediately after gaped several times (tenth day),^{8c}.—About 11 P.M., while lying on the left side, an expansive, intense distress in the epigastric region, like unto heartburn, extending through the posterior border of the left scapula, continuing half an hour. Amelioration by lying on the right side (tenth day),^{8c}.—10 P.M., pain in the epigastrium, as of flatus (sixteenth day),^{8c}.

Abdomen.—Soon a tense feeling in the abdomen, as if the bowels were full of flatus (second day),^{8a}.—Soon after breakfast, and while walking in the open air, expulsion of odorless flatus per anum (second day),^{8a}.—3.40 P.M., pain in the right side of the abdomen, running downwards,

following the course of the rectus muscle (second day),^{8c}.—7.15 P.M., an aching in the left side of the floating ribs (fifteenth day),^{8c}.—Wandering pain in the right side of the abdomen, at 10 P.M. (sixteenth day),^{8c}.—[230.] 6.25 A.M., after a walk in the open air, and while sitting in my room, a bubbling in the hypogastric region (second day),^{8a}.—Pains in the hypogastrium from flatus, A.M. (second day),^{8a}.—4.30 P.M., severe flatulent pains in the hypogastrium and an emission of flatus, which is followed by pain in abdomen; 6 P.M., severe flatulent pain in the abdomen, preceding and during a diarrhœic stool, followed by feeling of weakness and perspiration on the face and neck (fifteenth day),^{8c}.

Respiratory Organs.—7.15 P.M., after a walk in the open air and on seating myself in a warm room, an itching in the right side of the trachea, producing a dry, hacking cough. Soon after an itching in the left side of the trachea, causing a dry hacking cough (fifteenth day),^{8c}.

Chest.—A soreness in the left lung, such as is felt during the convalescence from pneumonia, at 5.30 P.M., while at rest in my office (first day),⁸.—11 P.M., while lying on the left side, an aching at the lower third of the sternum, continuing several minutes (tenth day),^{8c}.—10.50 A.M., while walking in the open air, a sticking pain from without inwards in the region of the cartilages of the sixth and seventh ribs (twelfth day),^{8c}.—While in bed sore aching in the anterior wall of the chest (fourteenth day),^{8c}.—3.15 P.M., an intense aching at the posterior aspect of the middle of the sternum (fifteenth day),^{8c}.—During the day aching in the anterior wall of the chest (fifteenth day),^{8c}.—[240.] Drawing in the right anterior wall of the chest, soon after 3.50 P.M. (third day),^{8a}.—3.25 P.M., a drawing, crampy sensation in the right anterior of the chest and axilla, extending down the arm to the fingers, and terminating in a jerking of the little finger (thirteenth day),^{8c}.—3.40 P.M., pain in the right anterior wall of the chest, near the axilla (second day),^{8c}.—1.30 P.M., while writing, drawing sensation in the right anterior wall of the chest and right arm, passing down the arm to the elbow (third day),^{8c}.—5 P.M., aching in the right anterior wall of the chest, extending through to the right scapula (tenth day),^{8c}.—At 2.30 P.M., while inhaling, a drawing crampy sensation at the outer border of the right mammary gland, extending to the axilla and arm (fourteenth day),^{8c}.—Pulsating raw pain near the sternal border of the left mammary gland, seeming to be in the cartilage of the fifth rib, at 5 P.M. (second day),^{8c}.

Back.—3.50 P.M., pain under the lower part of the left scapula (third day),^{8a}.—2.35 P.M., broad pain passing from the lower angle of the right scapula to the locality of the serrations of the serratus magnus muscles, then a pulsating pain at the posterior aspect of the coccyx (fourth day),^{8c}.—9.50 P.M., a sore aching at the right scapula (fifteenth day),^{8c}.—[250.] 9.45 P.M., a crampy aching below the right scapula (fifth day),⁸.—3.5 P.M., a pulsating pain in the right sacro-iliac articulation, leaving a lameness, which is felt when walking (third day),^{8c}.—10 P.M., aching in the dorsal region (sixteenth day),^{8c}.—A pulsating pain in the left sacro-iliac articulation, at 2.18 P.M. (third day),^{8c}.—Aching in the coccyx, while in bed (fourteenth day),^{8c}.

Extremities.—Soon after 10.55 P.M., while lying on the left side, a drawing sensation and aching in the upper part of the right forearm, then a pulsating, deep pain in the right gluteal region, just above the tuber ischii, seeming to be in the periosteum, then a sharp pain just above the crest of the right ilium. After which the pain in the right gluteal region returned,

then a sharp pain just above the crest of the left ilium, then a drawing and aching in the right foot, then a drawing and aching in the anterior muscles of the right forearm, then a pulsating, deep pain in the right gluteal region, sensitive to pressure, then a drawing and aching in the anterior muscles of the left forearm. A drawing in the outer side of the left foot, extending to the plantar aspect, as if the foot would cramp, then a drawing and aching in the left leg, not relieved by motion. A lame aching and sense of drawing in the right forearm, near the elbow, then a return of the pain near the right tuber ischii, then aching in the right leg, then a pulsating, deep pain in the right thigh, at the inner border of the sartorius muscle (first day),^{8c}.—Soon after, 11.30 P.M., an aching in the right ankle, then aching in the right forearm, then a deep, pulsating pain in the right gluteal region, near the tuber ischii (second day),^{8b}.—6 P.M. drawing in the muscles of the right upper arm, then drawing in the dorsum of the right foot, then drawing in the plantar region of the right foot, shifting from place to place as rapidly as I can write the symptoms (second day),^{8c}.

Superior Extremities.—While in bed, aching in the muscles of the right arm (fourteenth day),^{8c}.—3.8 P.M., while at rest, a sharp pain passing through the right shoulder to the scapula (third day),^{8a}.—[260.] 4.15 P.M., while at rest, a drawing sensation and aching, commencing suddenly in the right axilla, moving down the inner side of the arm to the elbow (third day),^{8b}.—2.30 P.M., while at rest, a lame, aching pain in right upper arm (third day),^{8a}.—3.45 P.M., drawing, crampy sensation in the muscles of the right upper arm. After a short interval a similar sensation in the right elbow (thirteenth day),^{8c}.—7.15 P.M., a drawing sensation in the right upper arm, followed by an aching in the left side at the floating ribs (fifteenth day),^{8c}.—7 P.M., while riding on horseback, a drawing sensation in the muscles of the right upper arm (nineteenth day),^{8c}.—4.30 P.M., a severe aching pain at the internal condyle of the right arm, after a walk in the open air and while standing in the open air, continuing five minutes; at the same time, and while the arm is resting on a support, a sense of drawing at the inner side of the left upper arm (nineteenth day),^{8c}.—2.45 P.M., a sharp sticking pain in the right elbow (fifth day),^{8c}.—3.40 P.M., while inhaling, aching in the right forearm, commencing in the belly of the flexor carpi radialis muscle, extending through the arm. The arm is sensitive to pressure (tenth day),^{8c}.—9.30 P.M. aching in the left forearm (twelfth day),^{8c}.—3.45 P.M., sense of drawing in the right forearm, extending to the metacarpus (tenth day),^{8c}.—[270.] 4.30 P.M., a pulsating pain in the interosseous tissue, at the palmar aspect of the left forearm, near the wrist, extending to the little finger, where it becomes a drawing, crampy pain, then a drawing sensation, extending up the forearm from the wrist (third day),^{8b}.—9.45 P.M., a crampy aching in the right wrist (fifteenth day),^{8c}.—A transient drawing pain passing through the right carpus, leaving the wrist lame on motion, at 10 A.M. (fourth day),^{8c}.—9.25 P.M., after a walk in the open air and while in my room reading, a sharp pain suddenly pierces the palmar aspect of the left carpus, traversing the dorsum of the first and second fingers, becoming a drawing pain in its progress to the metacarpo-phalangeal articulation of those fingers, then involving all the metacarpo-phalangeal articulations of the hand, drawing the fingers closer together and the thumb towards the palm of the hand. The whole hand is numb, looks and feels swollen, its temperature is increased. Continued motion relieves the drawing, but not the numbness, which continued fifteen minutes (fourth day),^{8c}.—5.57 P.M., a drawing, crampy sensation in the left carpus, then in the an-

terior muscles of the right upper arm (twenty-first day),^{sc}.—3.47 P.M., crampy sensation, increasing to an aching, in the first phalanges of the right hand; continuing ten minutes, relieved by motion of the fingers (tenth day),^{sc}.—1.30 P.M., while writing, a dancing pain suddenly attacks the right metacarpus, terminating in a lame aching and a drawing sensation in the metacarpa region of the thumb and index finger (third day),^{sc}.—3.30 P.M., a drawing pain in the dorsal aspect of the metacarpal region of the right thumb (fifth day),^{sc}.—9.32 P.M., during the numbness of the left hand, a sharp pain in the dorsum of the first phalanx of the index finger of the right hand, shooting to the articulation of the first and second phalanx of the index finger (fourth day),^{sc}.—4.15 P.M., stinging in a small spot on the dorsum of the first phalanx of the second finger of the right hand (tenth day),^{sc}.

Inferior Extremities.—[280.] 3.20 P.M., an intermittent, pressing-outward pain at the left sacro-iliac articulation, sensitive to pressure, relieved by walking, but feels lame and sore (third day),^{sc}.—5 P.M., a pulsating pain in the right gluteal region, near the tuberosity of the ischium, sensitive to pressure (third day),^{sc}.—3.40 P.M., a pulsating pain at the left pubic bone, continuing several hours, generally relieved by walking, sometimes felt when walking; the pain seems to be in the periosteum; there is sensitiveness on pressure (second day),^{sc}.—10 A.M., while standing quietly before a hot stove, a return of the pain near the right tuber ischii (second day),^{sc}.—4.50 P.M., a pulsating, deep pain in the posterior and upper part of the right thigh (third day),^{sc}.—2.35 P.M., while writing, pain in the upper and posterior part of the left thigh (fifth day),^{sc}.—4.10 P.M., pulsating pain in the neck of the right femur, seeming to be in the capsular ligament, ceasing while walking, returning when at rest (tenth day),^{sc}.—At night, while in bed, a pulsating pain in the neck of the right femur; this pain was felt several times during the day (eleventh day),^{sc}.—1 P.M., a pulsating, deep pain in the neck of the right femur; this pain seems to be in the capsular ligament, at the inner border of the ilio-femoral ligament, and continues ten hours, relieved by walking (twelfth day),^{sc}.—5.5 P.M., a return of the pain in the neck of the right femur, continuing several hours (fourteenth day),^{sc}.—[290.] 3.27 P.M., while at rest, pain along the outer side of the right thigh (third day),^{sc}.—9.50 P.M., a lame aching at the inner side of the right thigh, just above the knee, followed by a wiry or threadlike pain in the right instep (fifteenth day),^{sc}.—Aching and sense of drawing in the outer hamstring of the right leg, at 3.40 P.M.; return of the aching and drawing, at 4.26 P.M. (second day),^{sc}.—3 P.M., a lame, aching pain in the right knee (third day),^{sc}.—9.20 P.M., while seated in a warm room, and immediately after supper, an intense crampy aching in the left knee, continuing eight minutes; not relieved by motion (nineteenth day),^{sc}.—3.50 P.M., a drawing pain in the right knee, extending into the anterior muscles of the thigh (third day),^{sc}.—12.30 A.M., while in bed, an intermittent pressing-outward pain in the right knee, relieved by motion (second day),^{sc}.—12 M., aching in the right leg (second day),^{sc}.—2.50 P.M., a numb aching passing down the outer side of the right leg to the foot, then an aching and sense of drawing in the outer hamstring (third day),^{sc}.—9 P.M., an intermittent aching in the right tibia (eighteenth day),^{sc}.—[300.] 3 P.M., a pulsating pain in the head of the right tibia, relieved by motion (second day),^{sc}.—5.30 P.M., while at rest, a pulsating pain in the head of the right tibia; the tibia is sensitive to pressure (second day),^{sc}.—6.30 P.M., a pulsating pain near the upper extremity and outer side of the right fibula. Immediately

after a pulsating pain in the right thigh (third day),^{8a}.—3.30 P.M., while at rest in my office, the right leg elevated and resting on the table, and after a walk in the open air, a crampy lameness in the right leg just above the instep, relieved by walking. Immediately after and while at rest, a drawing, crampy sensation in the hollow of the right foot, passing up to the outer ankle and along the outer border of the gastrocnemius muscle to the knee, relieved by walking, returning while sitting, the feet resting on the floor, passing slowly upwards from the outer ankle to the knee, then in the tibia, where it becomes a numb aching, then in the tarsus, where it occasions a drawing aching, as if the foot would cramp; continued motion relieves (second day),^{8a}.—While at rest, a numb, drawing sensation in the left instep, which extended to the knee, followed by a sense as of warm air, like an aura, ascending half way to the knee. The numbness and drawing then concentrated at the instep, where it remained a short time, and again the aura ascended slowly to the knee; at the same time both the tibia and fibula ache; there is also a sense of increased temperature and fulness in the leg. The numb drawing then moved over the dorsum of the foot to the toes, where it terminated in a prickling; relieved by motion, but returned when motion ceased (seventh day),^{8a}.—4.30 P.M., while at rest in a warm room, a transient pain passing upwards over the inner ankle of the left foot (fifteenth day),^{8c}.—8.30 A.M., while walking in the open air, sudden lameness and loss of strength in the left ankle (second day),^{8a}.—12.30 A.M., a crampy aching in the right instep, relieved by motion (second day),^{8b}.—5.44 P.M., while at rest in a warm room, the atmosphere loaded with moisture, south wind, a drawing, crampy sensation at the dorsum of the right foot, in the region of the external cuneiform bone, spreading outward and over the cuboid bone, and forward over the metatarsal bone of the little toe; then moving upwards to the region of the anterior ligament, where the drawing, crampy sensation ceases and becomes a bruised aching, extending to the external malleolus. Sometimes it extends up the tibia and fibula, producing a feeling of fulness in these bones. When walking there is lameness (twenty-first day); 3 P.M., while at rest in the house, a return of the aching in the right ankle (twenty-second day),^{8c}.—4.36 P.M., a threadlike pain in the right foot below the outer ankle, terminating in aching (twelfth day),^{8c}.—[310.] Drawing sensation in the right big-toe, as if the toe would cramp, at 6 P.M. (second day),^{8c}.—A sticking pain in the metatarsal joint of the big toe, at the plantar aspect (fourteenth day),^{8c}.

Generalities.—Several times during the afternoon a sense of weakness, with heat and perspiration on the face and neck (sixteenth day),^{8c}.—During the forenoon, aching in both sides and upper arms, the right side worse (sixteenth day),^{8c}.

Skin.—10 A.M., while at rest in my office, itching on the inner side of the left thigh, then above the right eye, then on the scalp; 10.15 A.M., itching at the inner border of the gastrocnemius muscle of the left leg, relieved by rubbing. Immediately after a tingling itching on the right side of the upper lip, then a crawling itching on the right malar region, then an itching moving downwards from the right commissure of the mouth, then an itching on the palmar aspect of the right carpus, moving towards the palm of the hand, then an itching at the angle of the jaw on the right side; 10.55 A.M., itching at the right eyebrow; 11.40 A.M., a biting-corrosive itching on the right forearm, over the belly of the palmaris longus muscle. Immediately after itching on the right side of the face, near the angle of jaw, then itching on the posterior aspect of the right forearm, then an itch-

ing on the dorsal aspect of the first phalanx of the index finger of the right hand (first day). During the afternoon itching on different parts of the exterior body (third day),^{8a}.—Itching on the extremities and face (first day),^{8c}.—Stinging itching on the right scapula, at 2.45 P.M. (tenth day),^{8c}.

Sleep.—Last night the sleep was dreamy and refreshing. It seemed more like a clairvoyant state. After midnight I dreamed of birds singing, which awoke me, and caused me to listen with intense interest, but stillness and darkness reigned supreme (third day),^{8c}.—The sleep last night was light and dreamy. After midnight I dreamed I entered a beautiful garden, from which I passed into a low woodland, in the eastern border of which was a sluggish, broad, shallow stream of water; to cross dry shod required some exercise of mind. This morning arose from bed refreshed, light-hearted, and cheery (second day),^{8c}.

CONCHIOLINUM.

Langenbeck's Archiv f. Klin. Chirurgie, XVIII, pt. 4. Inflammation of the bones (ostitis) in the mother-of-pearl grinders, by Dr. Carl Gussenbauer. Prof. Billroth has observed in his clinic during the past four years several cases of a peculiar inflammation of the bones in the mother-of-pearl grinders, to which English (Wien. Med. Wochenschrift, 1870) first drew attention. The peculiar characteristics have been defined already, together with a description of the progress of the disease, in his publications on this subject, in such a manner that the classification of this disease as a new and special one is perfectly reliable. English thinks that the occupation of the mother-of-pearl grinders itself is the cause of the disease. We had, therefore, from cases coming under our observation, in two directions, to make use of the clinical experiences, carefully collected, stating the variations in the symptoms, and thus representing the general picture of the disease, with reference to the etiology, course, and results; to verify the previous observations or to add to them. The etiology, with reference to the intimate relation of this disease to the occupation of the mother-of-pearl grinders, was, if possible, to be affirmed or proven. In regard to this, inspection of the factory rooms and close watching of the fabrication of mother-of-pearl buttons, give us most reliable information; upon this information we base our thesis.

For this purpose I visited several such factories, and came to the conviction that in all these factories, only one and the same injurious agency affects the workmen, and produces the peculiar inflammation of the bones. This injurious matter is the dust of the mother-of-pearl, which was so densely suspended in the air in all the factories inspected, that in a few minutes the clothing was gray.

These so-called "mother-of-pearl" button factories are not at all what we imagine, or like other factories, with large rooms and sufficient ventilation, corresponding to the number of workmen employed, but, on the contrary, are small low rooms, in which four to six or more turning-lathes are placed, so that the workmen have scarcely room enough for free motion. There is nothing in the utensils that can give rise to this peculiar inflammation of the bones. The necessary manipulations are not different from those used generally by turners. The only existing difference is the crude material.

Metal and wood-turners furnish, no doubt, a large percentage of the dis-

eases of the respiratory organs, produced by dust-inhalation, but they are never afflicted by the same diseases as the mother-of-pearl grinders.

English brought up the question as to which one of the constituents of mother-of-pearl the injurious effects are due, and stated that horn-turners also are affected with diseases, and more frequently than mother-of-pearl grinders; he thinks that the organic ingredients of these materials may be the injurious agents. English does not say positively whether the former are afflicted by similar diseases, and it seems as if such cases had never come under his own observation.

Hirt and Merkel in their able work on the diseases from dust inhalation do not mention a case of an analogous disease among the horn-turners. Now, if the idea were correct, that inhaling mother-of-pearl dust produces such a disease, the mode of its action is a mystery. In what manner do these injurious effects occur? Through the production of a general disturbance of nutrition, a dyscrasia, as English supposes, or in what other way?

To answer this question will be the theme of our present paper, in which the discussion on the etiology and pathogenesis of this disease will be the principal part.

The first question, whether inhaling the dust of the mother-of-pearl causes the disease, demands a close examination of the constituents chemically. It is almost exclusively the inner layers which are worked. After the mother-of-pearl is divided into small parts adapted to the purpose, the two layers are separated by splitting, and the inner layer of the shell is used for the grinders' work. The dust produced therefore by the grinding consists exclusively of atoms of this inner layer. The minimal quantity of dust produced by the steel instruments used at this work, and the wood splinters from the turning-lathes settle by their gravity to the floor, and consequently need not be taken into account.

The grinding of the shell pieces produces only a slight amount of dust, or none at all, as the grinding is generally done on a wet grindstone. It is, therefore, clear enough that the dust suspended in the workroom consists mainly of particles from the inner layer of the mother-of-pearl. According to chemical analysis of bivalve shells in general, the mother-of-pearl consists of 90-95 per cent. CO_2CaO , 2-3 per cent. of organic matter, and about the same per cent. of other salts. A reliable and correct analysis of mother-of-pearl could not be found. A knowledge of its constituents was necessary for understanding the effects of the dust. Dr. Klausen, assistant at the Pathological Institute of Chemistry, made, at my special request, a very reliable and satisfactory quantitative and qualitative analysis of the mother-of-pearl, for which I am very much indebted.

The shell of the *Avicula margaritifera*, which gives us the precious mother-of-pearl, consists, like other bivalve shells, of threefold anatomical and chemical constituents or layers. *First, the external or scale layers*, consisting of manifold brown, superimposed scales. *Second, the calcareous layer* (Schlossberger's terminology for the oyster-shells), consisting of a lustreless, chalk-white triturable mass, which is accumulated especially between the external and inner layers, though also between the single sheets of the former, and minimal quantities also in the latter. *Third, the mother-of-pearl layer*, the innermost of all the layers, possessing besides the known brilliancy of *mother-of-pearl*, the greatest firmness, and it is like the external layer, stratified. A calcareous substance is found between the single

laminæ in minute quantities. These different layers consist, according to Dr. Klausen's analysis, of the following compositions:

I. *The external scale layer*: 10.22 organic substance; 0.55 HO; 89.23 CO_2CaO , traces of MgO and alkaline salts.

II. *The calcareous layer*: 10.15 organic substance; 0.32 HO; 89.49 CO_2CaO , traces of MgO and alkaline salts.

III. *The mother-of-pearl layer*: 5.57 HO, insoluble organic substance; 0.11 HO, soluble organic substance; 0.47 HO; 93.555 CO_2CaO ; 0.295 alkaline salts (chlorides and sulphates).

PO_3 could not be detected in this.

The organic substance consists of 16.7 per cent. (results of two analyses) nitrogen. The organic substance insoluble in HO is also insoluble in diluted alkalis and acids. Concentrated boiling alkalis and acids dissolve the same, but decompose it. *Phosphorus and sulphur could not be detected in the organic substance.*

The organic substance of the mother-of-pearl is according to the results of analysis composed of the same constituents as all the other shells, and shows like them a great percentage of nitrogen.

It seems probable, on the simple observation of the circumstances under which the mother-of-pearl grinders work, that they constantly respire the dust, which enters freely with the act of inspiration into the bronchi, and eventually into the lungs, and that the dust enters the blood. I had nevertheless to prove by all means the truth of my hypothesis, the more as I base my conclusions upon this fact, such a doctrine must therefore be proved by the most reliable and simplest experiment.

To accomplish this I put a dog into a hermetically-closed tin box, into which by means of a ventilator the dust of the mother-of-pearl was blown; in this way the air was constantly more or less saturated with the dust. This dust I obtained from a mother-of-pearl button factory, in quantity about 60 pounds, and after being purified from the wood and steel splinters by means of a sieve, I used it for said purpose. With this quantity I continued the experiment for four months and a half, so that the animal had to inhale the concentrated dust in this apparatus four to five hours every day; the rest of the day he was kept in the dog-kennel. I thought of producing ostitis in young dogs, but could not see any results, but in regard to the entrance and accumulation of the mother-of-pearl dust into the respiratory organs, I had the best and most striking results. The dogs were entirely covered with the dust, and the openings of their nostrils densely overlaid by the dust, after a stay of only half an hour in the apparatus, when full at work.

After two weeks the dogs began slightly to cough. At first I had a female dog with two pups, six weeks old, in the apparatus for the experiment; but as the pups on the 5th and 12th of August died, in consequence of a lobular pneumonia, I had to take another young dog to continue my experiments until the end of September. On these dead animals I could detect the mother-of-pearl dust in the mucous membrane of the respiratory organs, and in the parenchyma of the lungs, in the nasal, laryngeal, tracheal, and bronchial mucous membrane. I could only detect the calcareous dust on the epithelia of the mucus, and here and there in the uppermost layer of the epithelia of the mucous membrane by the microscope, and by treatment with HCl. In the lungs of all four dogs (two of them were killed) the mother-of-pearl dust could be found, not only in the epithelia of the smallest bronchia and alveoli, but also, and more promi-

nently imbedded in the parenchyma, disseminated in particles of the size of a pin's head, and as large, too, as hemp-seed. These accumulations were discernible even to the touch as calcareous matter; they effervesced on addition of HCl. These accumulations of calcareous dust were, as the microscopical examination of specimens preserved in alcohol proves, present in the parenchyma of the lung-tissue. On the contrary, in specimens which were kept for a longer time in "Müller's fluid," and which have lost the CO_2CaO , I could by considerable magnifying, detect most minute particles of a homogeneous light-refracting substance, partly free in the tissue, partly in round cells, which was not at all changed in form or condition by adding a solution of potash dilute, HCl or HNO_3 , and therefore can be taken as the organic substance of the decalcified mother-of-pearl dust, "Conchiolin." The mother-of-pearl dust must have therefore entered in the smallest bronchi and alveoli through the epithelium, or after the destruction of this into the parenchyma.

Accumulations of mother-of-pearl dust in the bronchial glands of the dogs could not be detected. These experiments have doubtless proved that the mother-of-pearl dust inhaled by the mother-of-pearl grinders penetrates the lung parenchyma under perfectly analogous conditions as those under which the dogs were placed, only that the men breathe the same saturated injurious atmosphere for a longer time each day. This conclusion is borne out by the character of the diseases prevalent among the mother-of-pearl grinders.

In the beginning of their employment in these factories the men are frequently attacked by catarrhal bronchitis. The owners of these factories will not admit that these diseases are consequent upon their work in the factory.

It seems that the men after awhile get accustomed to the irritation which the dust exerts upon the respiratory organs, and consequently cough less frequently.

Observations and experience prove that when the inhalation of any dust is constant the respiratory organs become less sensitive to its irritating action, and if we remember that the quality of the mother-of-pearl dust is such that it irritates the tissues scarcely more than in a mechanical way, this will not seem strange.

Hirt and Merkel do not agree in their writings upon the diseases of the mother-of-pearl grinders. Merkel classes the mother-of-pearl grinding among employments injurious to health. Hirt does not pay much attention to it. Merkel mentions a discovery by Greenhow; in the lungs of a mother-of-pearl grinder, accumulations of the dust from the size of a millet-seed to that of a hazelnut were found, which corroborates the truth of our experiments. It would be of great interest to collect morbidity and mortality statistics from this profession. Vienna would be the best place for this purpose; there are the most flourishing factories of this kind. There are about two hundred to three hundred men employed in the factories known to me.

It struck me as a remarkable fact that in each factory which I visited the employed were from the ages of twelve to twenty. On inquiry upon this subject I could get only evasive and unsatisfactory answers.

Let us now consider the etiology and pathogenesis of these diseases.

We find first, that the disease has been observed in young people, who were not yet matured, before and after puberty. There is no case known to us where an individual fully grown has been attacked by it. After

working in these factories a longer or shorter time, that is from several months to one or two years, a part of these men contract the disease. (I cannot give exactly the percentage.) Workmen attacked once by the disease are always subject to it again when they renew their work. The disease first shows itself by a more or less intense pain in the bone which afterwards becomes the seat of the disease. The pain generally comes on suddenly; in the early stages of the malady it is continuous, but after several days is slightly remittent, and is generally described by the patient as a rheumatic pain. It is strictly localized in that part of the bone in which the further development of the disease takes place. Individuals who have been previously attacked recognize the beginning of the malady at once by the peculiar sensation of pain belonging to the disease. In the beginning the pain is not increased by pressure on the bone nor by muscular exertion.

Soon after the appearance of the pain, the general health is affected, and slight fever occurs. Sick persons whom I frequently attended, and upon whom I had good opportunity of making observations, had always a slight fever without chill. Increased thirst, diminished appetite, partial or total sleeplessness, general sensation of heat, alternating with slight chill (sometimes chill), secretion of a dark-colored urine, with sediment; these are the general symptoms. An elevated temperature, in patients at the clinic, was always detected. The patients generally can attend their work in this condition for a couple of days, until the increase of the pain and the exacerbation of the fever make work impossible. Then swelling of the diseased bone occurs as a second symptom.

The swelling always develops first on one or the other end of a diaphysis, never in the middle of it, nor on the epiphysis. If the disease is in a long bone, the swelling develops on a strictly circumscribed spot, whence it spreads.

Externally perceptible swelling is in the beginning purely periosteal, and towards the corresponding epiphysis, as well as on the border of the diaphysis, marked with a sharp, clear, distinct margin. The surrounding soft parts may afterwards participate more or less in the swelling, and then cause considerable swelling of the affected extremities. The swelling is extremely painful to the slightest touch, like every other swelling of the periosteum. Its consistence may vary. It is at first soft, elastic, more or less distinct, fluctuating. After a longer period it becomes solid, and may become as hard as a bone. We have seen no case in our clinic where an abscess had formed, but still, in two cases under our observation, we could positively diagnose an accumulation of fluid by the distinct fluctuation, which had been again reabsorbed.

English mentions a case in which formation of an abscess took place. I several times saw an ossification-like swelling, which, after a shorter or longer time, disappeared.

The swelling progresses with the disease from the end of the diaphysis towards the middle of the bone; it may then spread over the whole length of it, and also over the epiphysis. With the spreading of the inflammatory process to the epiphysis an inflammation of the joints takes place, which may end in suppuration.

English associates this constant occurrence of the swelling in one end of the diaphysis with the course of the nutrient arteries, and expresses himself as follows:

“The disease always begins on that end of the diaphysis towards which

the *arteria nutriens* is running; it is the point where the blood-pressure is greatest, and progresses towards the opposite end."

English comes to this conclusion by comparing the occurrence and progress of the swelling with the course of the *arteria nutriens* on the bones, which in the cases observed by him were diseased. English seems to think that a great blood-pressure causes the disease, or, at least, that it is one of the principal factors. It is very difficult to understand what the direction of an artery or a greater blood-pressure has to do with the origin of an inflammatory process. I must contradict his conclusions, try to define my own, and explain in brief my views upon the etiology and pathogenesis of the osteitis among the mother-of-pearl grinders.

I take the dust of the mother-of-pearl, which, as proved, enters by the act of respiration (with the respiratory air) into the lung-tissues, as the injurious agent which produces the osteitis.

The *Conchiolin* must be the irritant producing the inflammation of the bones. The retarding of the blood stream in capillaries of the marrow must be consequent upon the accumulation of Conchiolin in the vessels, causing obliteration of the smallest vessels, and consequently embolism. In every respect, I think the Conchiolin, the insoluble organic substance of the mother-of-pearl, the irritant agent.

The multiplicity of the osteitis in mother-of-pearl grinders has some similarity with the periostitis consequent upon syphilis, pyæmia, or septicæmia.

The *etiology* and *pathogenesis* of said disease may be as follows:

The mother-of-pearl grinders inhale the mother-of-pearl dust, which partly enters into the lung-tissues, and partly is again expectorated. The dust accumulates in the lungs in small disseminate particles, and produces a local inflammation of the lung-tissues, which rarely ever shows any perceptible symptoms. It may although, in course of time, by long-lasting inhalation, occasion such changes in the lung-tissues as follow the inhalation of any other kind of dust. The mother-of-pearl dust, consisting of CO_2CaO and *Conchiolin* becomes changed by degrees in the lung-tissues. The CO_2CaO becomes dissolved, and the *Conchiolin* remains as an insoluble substance in the fluids of the body; this gets like other kinds of dust into the circulation, accumulates in the capillaries of the bones, in consequence of retarding the circulation of the blood, forms embolia in the capillaries in the ends of the diaphyses, and eventually occludes the smallest arteries and causes an infarctus. The primary osteomyelitis leads only by contiguity to osteitis, periostitis, and articular inflammation. As an osteomyelitis caused by a certain substance of the mother-of-pearl, we may call it a "Conchiolin osteomyelitis."

The osteitis and periostitis which always accompany the osteomyelitis, according to the above explanation, have to be regarded only as progressive inflammations of the respective tissues, and have no specificity for it. But if, as experience teaches, the inhalation of horn-dust produces a similar or the same bone disease, which I think very probable, then there may be also, besides the Conchiolin osteomyelitis, a horn-substance osteomyelitis.

Here are a few clinical observations:

I. *Ostitis maxillæ inferioris*. B. T., age fifteen years, three years employed in a mother-of-pearl factory; also osteitis of forearm.

II. *Ostitis radii et ulnæ utriusque*. N. F., age seventeen years, employed two years.

III. *Ostitis fibulae sin.* J. J., age sixteen years, three years employed in the factory.

IV. *Ostitis ulnae dext.* D. T., age fifteen years, in factory one and a half years.

V. *Ostitis ossium metatarsi pedis sin.* T. G., age fourteen years, in factory two years. First time in our clinic May 20th, 1872. Second time, *Ostitis ulnae sin.*, December, 1873. Third time, *Ostitis scapulae sin.*, October, 1874. Fourth time, *Ostitis humeri sin.*, *ossis cuboidei sin.*, *et ossis tali dext.*, December 19th, 1874.

VI. *Ostitis femoris sin.* K. Sch., age eighteen years, worked three and a half years in mother-of-pearl factory.

All these cases show that the *bone inflammation* of the mother-of-pearl grinders always commences as an *osteomyelitis*, and that the *ostitis* and *periostitis* follow as a consequence.

According to our familiarity with the character of the ostitis of the long bones, must the *etiology* and *pathogeny* of the primary *osteomyelitis* in the short and flat bones, be traced back to the same process; that is, the accumulation of *Conchiolin* in the spongy substance, and embolism of the smallest bloodvessels.

I have only to remark one fact more, that the periosteal swelling appears under analogous symptoms of a periosteal abscess, but after all we never had an opportunity to see a spontaneous perforation, but always reabsorption.

The result of the disease is, according to present experience, as a rule, resolution; that is to say, favorable. Suppuration is less frequent.

The question why persons attacked once are again subject to this disease, is not yet settled, as the inflammation in general does not occur the second time in the same place, but, on the contrary, in a new place, so it may be called every time a new special disease. Strange to say, persons quitting the factories are free from the disease, but as soon as they return to work they get the disease again.

Prognosis is favorable. Nutrition is not disturbed, and, after the inflammatory process subsides, perfect health may follow.

CONIINUM BROMATUM.

Authority. Dr. Dujardin-Beaumetz, Bull. gen. de Therap., vol. xci, p. 8. Dr. S. took 15 centigrams of the crystallized Bromo-hydrate, representing 5 centigrams liquid Bromine and 8 centigrams Coniinum; the next day, at 7 A.M., took another dose.

After two hours I experienced vertigo, difficulty in intellectual work, and a state of cerebral emptiness, symptoms which attained their maximum about noon. There followed great muscular feebleness, but the predominating symptoms were vertigo and emptiness in the head. There was a state of inactivity rather than a tendency to sleep. The trouble disappeared after coffee.

CONIUM.

Authorities. 65, Geo. G. Sigmond, M.D., Lancet, 1836-7 (2), p. 647, Bergius speaks of some children who ate the root; 66, *ibid.*, effects on a man; 67, Dr. Bouchardat, Repertoire de Pharm., August, 1850 (Chemist,

London, 1850-51, p. 141), a young woman swallowed a strong dose of the juice; **68**, X. Landerer, Pharm. Journ., Third Ser., vol. vi, 1875, p. 493, effect of chewing a small piece of the root; **69**, E. W. Berridge, U. S. Med. Invest., New Ser., vol. iv, 1873, p. 574, Mr. — took 10 drops of tinct. in water (first day); 20 drops (third day).

Intoxication, vertigo, great heat, and pain in the stomach, quickly followed; then convulsions, epilepsy, distortions of the eyes, flowing of blood from the ears, the jaws so shut that no force could open them, efforts to vomit, but nothing thrown up; singultus,⁶⁵.—Delirium, with constant heat of the stomach and inextinguishable thirst were of long continuance, followed by an erysipelatous tumor in the neck,⁶⁶.—Unconscious; eyelids firmly closed; force was necessary to open them; pupils dilated; respiration, though weak, was performed in a satisfactory manner; pulse small, 82; skin, although not icy, was cold; some slight spasmodic movements in the superior members and in the muscles of the face,⁶⁷.—Giddiness; headache; symptoms of amblyopia,⁶⁸.—[1360.] Horrid dreams, from which he woke in fright, about 3 or 4 A.M., with feeling of distension of stomach, relieved by lying on it. A nervous feeling, and slight palpitation of heart, like nightmare (fifth to eighth days),⁶⁹.

COPAIVA.

Authorities. **23**, Dr. A. Kennedy, Month. Hom. Rev., vol. xx, p. 479, 1876, J. McK., set. twenty-two years, took the oil for gonorrhœa; **24**, F. Taylor, M.D., Guy's Hosp. Rep., 1876, p. 1, Weickart's experiments, took 1½ ounce of the *Mistura Copaiba Resina*, containing about 20 grains, three hours after a full meal; **25**, *ibid.*, took 3 ounces of mixture two hours after a full meal.

The urine passed after forty-five minutes gave no precipitate nor turbidity with Nitric acid, but some passed after one hour and twenty minutes became opalescent on the addition of either Nitric or Acetic acid. The same reaction occurred with that passed two hours after, but not with the next instalment, passed nine hours after taking the drug,²¹.—The urine passed after twenty, forty, and sixty minutes gave no reaction, but a turbidity was produced in that passed one hour and twenty-five minutes after the dose, and the precipitate was abundant in that discharged fifty minutes later. Twelve hours after taking the medicine the urine became only faintly opalescent on the addition of Nitric acid, and it was not further tested,²².—Three weeks ago contracted a first gonorrhœa, for which he used injections of Sulphate of zinc. These arrested the discharge for a time, but it returned, and he began to take the oil of Copaiba. On May 19th he took two tablespoonfuls of the pure oil, besides having taken one tablespoonful two or three days previously. After each dose he was sick and vomited a little. On the 20th the discharge stopped; he had a rigor, and noticed his face swollen and red. Went to business without taking food. On the 21st he had great thirst, nausea, vomiting, complete anorexia, restlessness, with increase of swelling and redness of face. The arms and legs, and finally the body, became red and swollen. When seen, May 22d, I found the whole body œdematous, face dusky yellowish-red color; œdema, worst about eyelids, which could not be opened; some sticky discharge at margins of eyelids; surface of skin of face and neck raised rather like measles. This is more observable where the raised eruption terminates, next the hair and at lower parts of neck. Over the body

is a darkly-reddish smooth eruption, studded with innumerable points of a deeper color scattered over the surface. The hands and feet somewhat resembled the face in appearance. The throat is inflamed, of a dusky redness, with œdema of uvula; no difficulty in swallowing. He complains of feeling very ill; he is sick and restless, and had no sleep, but tossed about all night. No pain complained of; no difficulty with the urine, which is rather dark in color, without deposit. Still intense thirst; tongue very foul, yellowish-white thick fur; bowels not moved for two days. Morning temp. 104°; pulse 140, small, thready. In the evening temp. 103°; pulse 130; stronger. Complains of his head going round during day, and of slight sore throat; thirst less; has taken a little food; felt sick and retched after it, but retained what he took; the penis œdematous; no pain in micturition; bowels moved slightly; has taken 3j of brandy every two hours,²³.

CORIARIA MYRTIFOLIA.

Coriaria Myrtifolia, L.

Natural order, Coriariace.

Authority. A. Roux, Lond. Med. Gaz., 3, 611, poisoning of four children by berries; one ate 80 or 100, the others considerably less.

Eyes bright and rolling in their sockets.—Pupils dilated.—Face bloated and livid.—Foaming at mouth (as in epileptic patients).—Trismus (as in epileptic patients).—Pulse rather full.—Convulsions of limbs (as in epileptic patients).—Convulsive motions of short duration in general, though they continued longer in the limbs of the left side.

CORIARIA RUSCIFOLIA.

Authority. 9, H. G. Hughes, Pharm. Journ., Third Ser., vol. ii, 1871, p. 281, ate about 1½ grains of the resin.

Disagreeable irritating sensation in the throat, extending to the stomach, with pain across the region of the stomach, accompanied by nausea (in five minutes). In a quarter of an hour vomiting came on, which continued more or less for two hours. Very unpleasant sensations continued for two hours more, when, after great flushing of the face, with all but intolerable heat, the effects passed away.⁹

CORNUS FLORIDA.

C. Florida, L.

Natural order, Cornaceæ.

Common name, Dogwood.

Authority. Inaug. Dissert., by John M. Walker, Philad., 1803, experiments on pulse.

30 grains pulv. cort. rad. Cor. flor.: Pulse 62, soft, natural at time of taking; 62, slight change (after five minutes); 63, full, heat at stomach (after ten and fifteen minutes); 65, quick and full (after twenty minutes); 66, full and strong (after twenty-five minutes); 68, full and strong (after thirty minutes); 69, tense (after thirty-five minutes); 70, flushed face (after forty minutes); 70, tense, heat increased (after forty-five to sixty minutes); 68, full, regular (after seventy-five and eighty-five minutes); 65,

reduced in fulness (after ninety-five minutes); 63 (after one hundred and five minutes).

12 grains of the resin of *Cor. flor.*: Pulse 62, soft, natural at time of taking; 62, slight disgust (after five minutes); 61, nausea (after ten minutes); 61, in a slight degree quick and fuller (after twenty minutes); 63 (after twenty-five minutes); 63 (after thirty minutes); 66 (after thirty-five minutes); 68 (after forty minutes); 70 (after forty-five minutes); 72 (after fifty minutes); 73 (after fifty-five minutes); 71, slight headache (after sixty minutes); 69 (after sixty-five minutes); 67 (after seventy minutes); 68, irregular (after seventy-five minutes); 65 (after eighty minutes); 63 (after eighty-five minutes); 60, small (after ninety-five minutes). *

12 grains extract of *Cor. flor.*: Pulse 68, natural and soft, on taking the drug; 68, full (after five minutes); 69, and full (after ten minutes); 70 (after fifteen and twenty minutes); 72, agreeable heat (after twenty-five minutes); 73, tense and regular (after thirty and thirty-five minutes); 74, and regular (after forty minutes); 76 (after forty-five minutes); 77, fuller and tense (after fifty to sixty-five minutes); flushed face (after fifty-five and sixty minutes); 76, hard and tense (after seventy-five minutes).

12 grains of gum of *Cor. flor.*: Pulse 62, natural on taking the drug; 62, slight change in fulness (after five minutes); 63 (after ten minutes); 65, full (after fifteen minutes); 66, full (after twenty minutes); 67, full (after twenty-five minutes); 70, fuller and regular (after thirty, thirty-five, and forty minutes); 71, moderately tense (after forty-five minutes); 70, moderately tense (after fifty and fifty-five minutes); 69, moderately tense (after sixty and sixty-five minutes); 68, soft, but full (after seventy minutes); 64 (after seventy-five minutes).

2 ounces decoction of *Cor. flor. r.*: Pulse 66, natural, on taking; 67 (after five minutes); 68 (after ten and fifteen minutes); 70 (after twenty minutes); 72 (after twenty-five and thirty minutes); 77 (after forty minutes); 80 (after fifty minutes); increase in strength and fulness (after five to fifty minutes); 80, bounding (after sixty minutes); 78, slight pain in the head and flushing of the face (after seventy minutes); 77 (after seventy-five minutes); 74 (after eighty minutes); 73 (after ninety minutes); 67, quick and soft (after one hundred minutes). *

2 ounces of infusion of *Cor. flor. r.*: Pulse 72, natural, on taking; 73 (after five minutes); 74 (after ten and fifteen minutes); 75, fuller (after twenty minutes); 76, fuller (after twenty-five minutes); 78, full and tense (after thirty minutes); 79 (after forty minutes); 81, full and tense (after fifty minutes); 84, full and tense (after sixty minutes); 84, strong (after seventy minutes); 83, strong (after seventy-five minutes); 81, strong (after eighty minutes); 79, flushing of face (after eighty-five minutes); 78 (after ninety minutes); 75 (after one hundred minutes).

CORNUS SERICEA.

C. sericea, L.

Natural order, Cornaceæ.

Common name, Silky Cornel.

Authority. Inaug. Dissert., John M. Walker, Philad., 1803, experiments on pulse.

30 grains pulv. cort. rad. *Cor. seri.*: Pulse 70, naturally full, on taking;

72, quick, soft (after five minutes); 73, quick, soft (after ten minutes); 74, slight nausea (after fifteen minutes); 76, full (after twenty minutes); 76, nausea ceased (after twenty-five minutes); 78, full and tense (after thirty and thirty-five minutes); 79, full and tense, face red (after forty minutes); 79, regular, hard (after forty-five minutes); 78, full (after fifty, fifty-five, and sixty minutes); headache (after sixty minutes); 77, full (after seventy-five minutes).

12 grains of the resin of *Cor. seri.*: Pulse 72, natural, on taking; 72, small (after ten minutes); 73, considerable nausea (after fifteen minutes); 75 (after twenty minutes); 75, fuller (after twenty-five minutes); 76, full (after thirty minutes); 77, full (after thirty-five and forty minutes); 79, full, tense (after forty-five minutes); 80, full (after fifty minutes); 82, tense, regular, face flushed (after fifty-five and sixty minutes); 80, heat of the skin (after sixty-five minutes); 79, tense (after seventy and seventy-five minutes); 77, full and softer (after eighty minutes); 75 (after eighty-five minutes); 72 (after ninety-five minutes).

12 grains extract of *Cor. ser.*: Pulse 76, natural, on taking; 76, soft and full (after five minutes); 77, (after ten minutes); 78, anxiety (after fifteen minutes); 78, full and regular (after twenty minutes); 79 (after twenty-five minutes); 80, tense, face flushed (after thirty minutes); 81 (after thirty-five and forty minutes); 82 (after forty-five and fifty minutes); 80 (after fifty-five minutes); 79, diminished in hardness (after sixty and sixty-five minutes); 78 (after seventy-five minutes); 77 soft and full (after ninety-five minutes).

12 grains of gum of *Cor. ser.*: Pulse 64, natural, on taking; 65, full and regular (after five and ten minutes); 67 (after fifteen minutes); 67 and fuller (after twenty minutes); 68, fuller (after twenty-five minutes); 71, tense and strong (after thirty and thirty-five minutes); 72, tense and strong (after forty minutes); 73, tense and strong (after forty-five minutes); 71, slight change (after fifty minutes); 70, full (after fifty-five minutes); 69, full (after sixty minutes); 68, full (after sixty-five minutes); 68 (after seventy minutes); 67, natural (after seventy-five minutes).

2 ounces of decoction of *Cor. ser. r.*: Pulse 68, natural, on taking; 68 (after five minutes); fuller (after ten to forty minutes); 69 (after ten minutes); 70 (after fifteen minutes); 71 (after twenty and twenty-five minutes); 73 (after thirty minutes); 74 (after forty and fifty minutes); flushing of the face (after fifty minutes); 76 (after sixty minutes); 80, full and strong (after seventy minutes); 79 (after seventy-five minutes); 76, slight affection of the head (after eighty minutes); 73 (after ninety minutes); 70 (after one hundred minutes).

2 ounces of infusion of *Cor. ser.*: Pulse 76, natural, on taking; 76 (after five minutes); 79 (after ten minutes); 80 (after fifteen minutes); fuller (after fifteen to thirty minutes); 81 (after twenty minutes); 82 (after twenty-five minutes); 84 (after thirty and forty minutes); tense (after forty to seventy-five minutes); 85 (after fifty minutes); 87 (after sixty minutes); 85 (after seventy minutes); 84 (after seventy-five minutes); 82, heat of the skin (after eighty minutes); 79 (after eighty-five and ninety minutes); 77 (after one hundred minutes).

CROCUS.

Authorities. 13, Wm. Alexander, M.D., *Experimental Essays*, London, 1770, effects on himself; 14, E. W. Berridge, *Am. Journ. Hom. Mat. Med.*, New Ser., vol. v, 1876, p. 245, Mrs. — put 7 drops of 3d in a glass of water, and took a teaspoonful every three hours, for three or four days, for a chronic affection of the eyes; same symptoms a second time of this medicine.

[340.] While taking it throbbing pain came on in first left upper incisor, extending round to all the teeth in left upper jaw (all decayed); worse by any one walking across the room or by opening mouth; better by quiet; the throbbing was as if the blood were being pumped through too quickly; it caused throbbing in forehead and vertex. The toothache was followed by watery diarrhoea, generally about 4 A.M., once about 10 P.M., and before and during the stool there were sharp cutting pains in abdomen, from sides of abdomen to centre, making her bend forwards, which relieved the pains; for three or four weeks the toothache and diarrhoea alternated; the toothache would last all day, being bad for an hour; the diarrhoea generally from 4 A.M. to 1 or 2 P.M.; generally had one or the other every day. The hair fell off temples and sides of head,¹⁴—10 grains of Saffron, made into a paste with a little bread, was taken in the morning on an empty stomach. It made no alteration on the mercury in the thermometer at my stomach; it did not affect my pulse, nor operate in any manner that I could be sensible of. The next day I took 1 scruple of Saffron, which did not alter the height of the mercury, though my pulse soon after was more frequent by two or three strokes in a minute. This I imagine was accidental, as I felt no effect from my dose. Some days after I took 2 scruples. An hour afterwards I found the mercury in the thermometer at my stomach risen one degree. Upon this I expected that my pulse would be risen also, but was very much surprised to find it fallen from 72 to 66; and still more to find that it continued about 66 and 67 all the rest of that day. Some days after I took 4 scruples. This had no manner of effect, either on the mercury in the thermometer at my stomach or my pulse; so that I concluded the remarkable diminishing of it in the last experiment had not been owing to any effect of the Saffron, but to some other cause. I expected it would have perhaps tinged my urine, the color of which I examined carefully from time to time, without being able to discover the least alteration in it. The excrement, however, that I passed, was very strongly tinged with it,¹⁵.

CROTALUS CASCABELLA.

Authority. 3, S. B. Higgins, *Ophidians*, Philada., 1873, p. 112, the wound was inflicted in a man's finger.

Mind.—Anxiety (after two hours and twenty-five minutes),³.—Inquietude and anxiety increased (after two hours and fifty minutes),³.—Feels exceedingly downcast (after three hours and four minutes),³.—[290.] Inquietude (after three hours and fifteen minutes),³.—Involuntary groans and moaning (after three hours and four minutes),³.—Groans (after seven hours),³.—Has a feeling of stupidity (after five hours and thirty minutes),³.

Head.—Unpleasant sensation in the head (after one hour and thirty minutes),³.

Eye.—Feels a blur before his eyes (after one hour),³.

Nose.—Slight epistaxis (after two hours and fifty minutes),³.—Flow of blood from the nose (after three hours and thirty minutes),³.—Flow of sanguinolent serosity from the nostrils (after seven hours),³.

Face.—Face much flushed (after three hours and thirty minutes),³.—[300.] A crawling sensation in the face (after one hour),³.—Feels it difficult to move the lips (after one hour and thirty minutes),³.

Mouth.—Salivation (after four hours and thirty minutes),³.—Saliva thick, dark-colored, viscous; spits with difficulty (after five hours and thirty minutes),³.—Saliva whitish, viscous (after seven hours),³.—Finds it difficult to speak (after two hours and five minutes),³.

Throat.—Sensation of constriction in the throat (after one hour and thirty minutes),³.—Constriction in the throat; respiration difficult (after four hours),³.—Sensation as of a knot in the throat (after seven hours),³.—Feels a pain in the œsophagus, which extends to the stomach and abdomen (after one hour and forty-eight minutes),³.—[310.] Swallows with difficulty (after two hours and twenty-five minutes),³.—Deglutition difficult (after seven hours),³.

Urinary Organs.—Abundant discharges of urine (after five hours and thirty minutes, and seven hours),³.

Chest.—Unbearable pains in the thorax (after four hours),³.

Pulse.—Pulse strong; increases at intervals from 110 to 140 per minute (after one hour); pulse accelerated (after one hour and thirty minutes); pulse 96 (after two hours and fifty minutes); pulse 100 (after three hours and four minutes); pulse 98 (after three hours and thirty minutes); pulse 104 (after four hours and thirty minutes); pulse 104 (after five hours and thirty minutes),³.

Neck.—Sensation of plenitude in the jugular veins, which is soon felt in the sides of the throat and nape of the neck (after one hour),³.

Superior Extremities.—Swelling of the hand, and drops of blood escape from the wound,³.—Pain in the palm of the hand, which extends up to the wrist,³.—The hand is exceedingly swollen, accompanied by a sensation of cold, which is also felt in the lower extremities (after one hour),³.—Pain and œdema extend from the hand nearly up to the elbow (after one hour and twenty minutes),³.—[320.] The entire arm is swollen and very painful (after one hour and a half),³.—Swelling of the arms (after two hours and fifty minutes),³.—Pains in the arms (after three hours and fifteen minutes),³.—The pains cause frequent groans (after five hours and thirty minutes),³.

Generalities.—Visible tremors in whole body (after one hour and thirty minutes),³.—Patient excessively prostrated (after four hours),³.—Muscular prostration (after five hours and thirty minutes),³.—The whole body seems to fill itself up (after one hour and twenty minutes),³.—Great pain in the surface of the whole body (after four hours and thirty minutes),³.

Skin.—The whole body is flushed and red (after three hours and thirty minutes),³.—[330.] Body a much darker red (after four hours),³.—The blood starts from a pustule in the arm-pit (after three hours and thirty minutes),³.

Sleep.—Inclination to sleep (after one hour and thirty minutes),³.—Profound sleep (after nine hours and fifteen minutes),³.—Somnolency (after seven hours),³.

Fever.—He feels cold, and desires to cover himself (after one hour and thirty-eight minutes),³.—Sensation of cold in the feet (after one hour and

forty-eight minutes),³.—General perspiration (after three hours and four minutes),³.—The skin is moist (after five hours and thirty minutes),³.—Copious perspiration in the chest (after two hours and twenty-five minutes),³.

CROTALUS HORRIDUS.

Authorities. - **16**, Dr. Renzger, *Lancet*, 1829-30 (Σ), p. 90, a child, æt. two years, was bitten on the left cheek, and died in a few minutes; **17**, Dr. Pihoreff, *Lond. Med. Gaz.*, vol. xxix, 1841-42 (1), p. 487, Mr. Drake was bitten, and died in nine hours; **18**, *Bost. Med. and Surg. Journ.*, vol. xxxi, 1844, p. 208, Dr. Stadia was bitten on the right hand; **19**, T. A. Atchison, *South. Journ. of Med. and Phys. Sci.* (*Bost. Med. and Surg. Journ.*, vol. xlviii, p. 200), Miss R., æt. seventeen years, was bitten on the left instep; **20**, J. C. Blackburn, *Nelson's Amer. Lancet* (*ibid.*, p. 488), a negress was bitten on the ankle; **21**, L. E. Whiting, *Bost. Med. and Surg. Journ.*, vol. l, 1854, p. 258, Mr. B. was bitten on the little finger; **22**, John T. Jones, M.D., *South. Med. and Phys. Journ.*, vol. vi, 1858, p. 376, a girl, æt. eighteen years, was bitten just above the right ankle and on the anterior portion of the leg; **23**, Geo. T. Jenkins, M.D., *Med. and Surg. Reporter*, vol. xxii, 1870, p. 458, Chas. S. was bitten on the right forefinger; **24**, J. P. Richardson, M.D., *Philada. Med. Times*, 1879 (1), p. 306, Mr. R. was bitten on the left ringfinger.

Countenance of a deadly paleness; eyes half open and staring; mouth covered with foam; extremities cold and insensible; pulsation of heart irregular, trembling, and scarcely perceptible; respiration slow and laborious; body perfectly motionless, and covered with cold viscous sweat; eyes and ears appeared to be inaccessible to any impressions (in ten minutes); face slightly convulsed (after fifteen minutes),¹⁶.—[**430.**] Almost as quick as thought the hand commenced swelling, and before the preventive could be applied the place of the bite had swollen to the size of a butter-nut, and so closed the wound that the medicine, if there was any virtue in it, could not take effect. Within one hour after he was bitten he was so overcome by its effects that he could not sit up; went to his bed; was bled as often as once an hour during the succeeding night; lingered through the next day until about 7 o'clock in the evening,¹⁸.—Paleness; breathing stertorous; involuntary passage of urine and feces; pupils contracted; complained of cold and vomited; the vomiting repeated every half hour; the matter thrown up of a yellowish-green color and fetid; difficult swallowing; anxiety; pulse scarcely perceptible,¹⁷.—Almost moribund, pulse wavy and scarcely perceptible at the wrist, surface cold and bathed in perspiration, face swollen, with a besotted expression, mind wandering, pupils dilated, could not see, declaring it was very dark although candles were burning in the room, asked frequently if it was not raining hard, although the night was calm and clear,¹⁹.—Deathly sick; cold rigors running over her; pulse 120, small, quick, and threadlike; the entire leg was swollen to twice its normal size,²⁰.—In about forty minutes the finger was enormously swollen, and the hand also, for about half way to the wrist,²¹.—Foot and leg much swollen; extreme nausea and frequent puking; covered with cold perspiration, and shivering like one in the cold stage of an intermittent; anxious countenance; hurried breathing; pulse frequent and feeble; involuntary evacuations of urine every few minutes (after three hours),²².—Suffering the most intense pain in the entire arm, which was swollen to

more than twice its natural size, and of a livid, spotted color; respiration quick and laborious; pulse weak, and 115 per minute; surface covered with cold sweat; terrible state of nervous agitation (after four hours),²³.—On the second day the hand and arm was greatly swollen to the shoulder; otherwise the case appeared to be doing well. Thus passed four days, he suffering some cerebral pain and malaise. On the fifth day he spoke of a feeling of soreness in the flesh of the right hip, and on examination a jet-black spot some two inches in diameter was discovered, with elevation or thickening of the skin to the extent of about one line, edges well defined. During the next four days this discoloration extended up to a level with the umbilicus, completely around the body, and down the lower extremities, disappearing at the toes last, when convalescence was established,²⁴.

CROTON TIGLIUM.

Authorities. **64**, M. Andral, *Gaz. Med. (Bost. Med. and Surg. Journ., vol. vi, 1832, p. 194)*, effect of application to the skin of from 4 to 20 drops in more than thirty cases; **65**, Dr. Maudezin, *Gaz. des Hop.*, 1869, p. 290, a child, æt. six years, took all at once 3 grams of Croton oil in a cup of coffee; **66**, G. H. Snead, M.D., *Rich. and Louis. Med. Journ.*, 1872, p. 651, Mrs. S. took two teaspoonfuls of Croton oil mixed with two parts of sweet oil.

The child was taken with the most acute pain in the epigastric region, followed by violent, extremely profuse vomiting for three-quarters of an hour. After this she fell into a profound sleep for a quarter of an hour, when she called for food. She had no more pain in the epigastrium or abdomen, and had only two profuse stools. Afterwards there was a fine vesicular eruption on the lips caused by contact of the oil; in other respects the child seemed well,⁶⁵.—Burning sensation in stomach and bowels; rapid and drastic purging (soon); pulse 150 and scarcely perceptible; entire surface bathed in cold, clammy sweat; countenance sunken; copious watery choleraic dejections every few minutes (after two hours),⁶⁶.—A few hours after the friction (supposing this to have been employed for some minutes) the patients experienced a smart tingling in the part. In some this sensation was transient; in others prolonged, but never to such an extent as to produce troublesome nervous disturbance; at the same time there appeared a great number of little red points, at the apices of which there were soon perceptible little pustules which, within from thirty to fifty hours, had become fully developed. Many of these became united, and there formed large patches filled with white opaque fluid. The eruption increased for three or four days, after which it remained stationary, and subsequently died away like small-pox. In some cases where the oil was applied to the face the eruption was more copious and intense than elsewhere,⁶⁴.

CUBEBA.

Authority. **9**, Thomas S. Page, M.D., *Lancet*, 1842-43 (1), p. 672, A. T., æt. twenty-two years, suffering from gleet, took $\frac{1}{2}$ ounce Cubebs.

Face red and swollen; lips dark purple; mouth containing a viscid frothy saliva; tongue dry, and chapped in the centre; teeth slightly coated with a brown sordes; veins of the forehead and temples turgid; eyes rolled

upward, injected, and their pupils contracted to a point; skin moderately warm and moist, with clammy perspiration; pulse very slow, moderately full, and dispersed by the least pressure; respiration very slow, short, and gasping. By agitating him violently he was aroused for a moment, uttered some incoherent expression, and sank back into comatose sleep,⁹.

CUNDURANGO.

Authority. 3, H. E. Dikeman, M.D., New Eng. Med. Gaz., vol. x, 1875, p. 486, proving with the officinal tincture; took 3 drops diluted in $\frac{1}{2}$ ounce water three times, and 4 drops twice (first day); 5 drops twice and 4 drops twice (third day), 4 drops at 6 A.M., 5 at 9 A.M., and $\frac{1}{4}$ grain *Sulph. morphia* at 4 P.M. (fourth day) 5 drops Cundurango three times (fifth day); 10 drops (sixth day).

Mind.—Confusion of mind (fifth day),³.

Head.—Dizziness (fifth day),³.—Headache, frontal (first day),³.—Dull headache in frontal region (third day)³.

Eye.—Pain in the ball of the left eye (third day),³.—[80.] Sight much dimmed (seventh day),³.

Mouth.—Tongue coated brown (seventh day),³.—Tongue feels as if burned (first day),³.—Acrid, burned feel of the tongue (fifth day),³.

Stomach.—Feeling of fulness of the stomach (first day),³.—Cardialgia (third and fourth days),³.—The pain in the stomach is intolerable (fourth day),³.—Severe gastric pains, mostly at the *cul de sac* of the stomach (seventh day),³.—Have a continuous pain in the stomach, like gastritis in character, though not affected by food or drink, heat or cold (seventeenth day),³.

Abdomen.—Flatulence (third day),³.—[90.] At 8 A.M. there is an uneasy feeling, not quite a pain, in, I should judge, the iliac region (third day),³.—Uneasiness of the bowels (fifth day),³.

Stool.—At 8 A.M. a stool, small, papescent, without any sense of aid from the sphincter muscles, some mucus mingled (third day),³.—Constipation (fifth day),³.—On the whole the bowels have been costive. When I had a stool the excrement was small in quantity, and dry in quality,³.

Urinary Organs.—Weary ache in left kidney (third day),³.—Occasional darts of pain through the kidneys (fifth day),³.—Strangury, imputed to the Morphine (fifth day),³.—Urinated several times during the night, with urging of the renal ducts (first night); urinate frequently (third and fifth days); still urinate frequently, at times an unusual quantity (seventh day),³.—The urine is almost colorless, emitted without effort, and there is urging in the renal ducts after the bladder is emptied (seventeenth day),³.

Pulse.—[100.] Pulse slightly accelerated (after three hours); slower than natural, at 8 P.M. and in the night (first day); small and slow (seventh day),³.

Back.—Pain in right scapular region, as if in the bone (first day),³.—Pain about fourth dorsal vertebra (first day),³.—Pain under apex of left scapula (third day),³.

Extremities.—Slight creeping pain along the periosteum of right humerus (first day),³.—Apparent increase of strength of legs when walking (fourth day),³.

Generalities.—Have increased in weight since commencing this

proving (seventeenth day).³.—Great stiffness of muscular system (fifth day).³.—Languid when awake in the night (first night).³.

Skin.—Skin tinted brown (seventh day); still brown (seventeenth day).³.—[110.] (Several chronic blotches on my skin are no longer visible; also a puffiness of hands and feet, that I attribute to various causes, without knowing the real one, has subsided), (third day).³.—Itching of legs along anterior and outer tibial region of both legs (third day).³.—Great itching in scapular region and on legs (fourth day); much itching of skin on shoulders, over sternum, and on anterior surface of tibiæ (fifth day).³.

Sleep.—Slept last night as if narcotized (third night); had a narcotized sleep last night from the alkaloid (fourth night).³.—Had a night of intermittent sleep (first night).³.

Fever.—Rigors (first and third days).³.

CUPRESSUS AUSTRALIS.

Natural order, Coniferae.

Proving by A. B. Jenner, Esq., and two others, with the tincture; Month. Hom. Rev., 9, p. 544.

Mind.—He is in much better spirits.

Head.—Pain in frontal region, rather dull than acute.—Sharp piercing pain from left occiput to left temple.

Stomach.—Increase of appetite, followed by loathing of food.—Voracious appetite.—Feeling of warmth in stomach.

Urinary Organs.—Pricking pains from kidneys to bladder, with increased desire to urinate, which comes away in a smaller stream than usual.—Feeling of constriction along the course of the urethra, particularly towards neck of bladder.

Sexual Organs.—Itching of glans penis, and orifice of urethra.—Aching pain in perinæum and in spermatic vessels, with feeling of weight in testes.

Back.—Dull aching pain in lumbar region.

Superior Extremities.—Pain in shoulders, especially on joint of right shoulder, extending down to elbow.

Inferior Extremities.—Pinching-drawing pain in knees, and along lymphatics of legs.—Sharp, shooting pain in patellæ, and in bend of knees.—Feeling of tension in calves of legs, with occasional spasmodic twittings, and a feeling of general malaise, all over body.

Fever.—Increased heat of body, without thirst.

CUPRUM.

Authorities. 56, R. A. Stafford, Lond. Med. Gaz., 1844-5 (Amer. Hom. Obs., 1876, p. 77, E. W. Berridge's Collection), Margaret P., æt. sixty-eight years, pricked her right thumb with a pin, which ran into the flesh about one-eighth inch; she often scoured out a dirty copper; 57, same, poisoning of Hester J., æt. sixty-five years; 58, E. W. Berridge, U. S. Med. Invest., vol. iii, 1876, p. 282, took ten doses of 3 glob. each of 100,000th (Fincke), at intervals of one to one and a half hours.

Head.—Afternoon, giddy when standing indoors (ninth day).⁵⁸.

Throat.—In morning mucus in throat, not to be detached by hawk-

ing, causing hoarseness of voice (second and third days); at times hoarse voice when reading aloud, caused by mucus in the throat, relieved by hawking; in the evening after sunset, when reading aloud, much saliva in mouth (sixth day); in evening after sunset, when reading aloud, hoarseness and much saliva in mouth (ninth day); hoarse voice in the morning (fifteenth day).⁵⁶

Generalities.—The thumb immediately swelled to double its natural size. Next day the whole hand and arm became immensely swollen and inflamed. She had great pains; fever came on, with quick pulse, thirst and furred tongue; the inflammation rapidly spread in the cellular integument of the forearm, or on the humeral part; leeches, fomentations, poultices, etc., were applied, but extensive abscesses formed, both in the hand and arm; these were opened, but others appeared in different parts of the cellular integument, and under the fascia; large incisions were made in them, and a profuse discharge of pus followed. This state of things remained for at least two months, when the inflammation of the arm gradually abated, and the wound healed; but the hand, and more particularly the fingers, remained humid, and more resembled the foot of an elephant (or the disease called elephantiasis) than the natural limb. The fingers and back of the hand were oedematous, and it was necessary to make frequent punctures in them to let out the fluid, which was transparent; abscesses still formed in the palm and wrist, which were opened when necessary; at length it became necessary to make an extensive incision from the middle of the forearm along the wrist, over the tendons, into the palm. From this time the swelling went down, and the wound discharged freely; after four months' treatment she got well, and ultimately will have a tolerably free use of the hand.⁵⁶—She was admitted January 21st, with abscesses in right hand, a diffuse cellular inflammation, extending a considerable way up forearm; both hand and arm were immensely swollen, and painful; she says the copper wires of the brush she was using, which were "caukered," ran into her palm; on the same evening her hand was extremely painful, and she could not use it; it began to swell to nearly double its natural size; an abscess formed in the palm, which was opened and poultices applied; other swellings formed, both on the back and palm of hand, containing pus; these, as fast as they occurred, were opened, but sloughing took place over the tendons of the wrist, which were exposed. This state lasted two months; at length the wounds healed, and in March she was discharged cured.⁵⁷

CUPRUM ARSENICOSUM.

Authorities. **20** (Berridge), *Echo du Monde Savant* (Med. Times, 1840, vol. ii, 141), five persons drank water impregnated with Cup. ars.; **21** (Berridge), Dr. Mitchell, Dublin Med. Press, 1843, vol. ix, p. 52, fifteen children ate sweetmeats colored with Ars. and Cu.; **22**, omitted; **23** (Berridge), Scheele's green, from *Encyclop. des Sci. Med.* (Am. J. of M. S., 1846, vol. xi, p. 252); **24** (Berridge), Dr. Prosper de Pietra Santa, *L'Union Med.*, Sept., 1858 (*Edinb. Med. Journ.*, 1860, vol. v, p. 961), diseases of workers in Schweinfurt's green; **25** (Berridge), Dr. S. Griswold, N. Y. *Journ. of Med.*, 1858, vol. v, p. 64, J. F., æt. thirteen years, was engaged in making paper in which Scheele's green was used; **26** (Berridge), Dr. H. Cooper Rose, *Lancet*, 1859 (1), p. 237, poisoning of a child, æt. nine

months; **27**, omitted; **28** (Berridge), Dr. W. G. Blogg, *Lancet*, 1860 (2), p. 596, effects on workmen in Scheele's green; **29** (Berridge), Dr. Hassal, *Lancet*, 1860 (2), p. 535, effect on manufacturers of Scheele's green; **30**, *ibid.*, effect on a man, æt. forty-five years; **31**, *ibid.*, effect on a man, æt. twenty-seven years; **32** (Berridge), Dr. J. B. Metcalfe, *Lancet*, 1860 (2), p. 535, case of poisoning; **33** (Berridge), Dr. Wintrebert, *Bull. Med. du Nord.* (*Lancet*, 1873 (2), p. 49), effect of local use of green paper; **34** (Berridge), Kittel, *Allg. Wiener Zeit.* (*Lancet*, 1873 (1), p. 174), conjunctivitis due to Schweinfurt's green; **35**, Joseph Farrar, *Brit. Med. Journ.*, Jan. 6th, 1877, a man, æt. twenty-two years, was in the habit of holding his paint brushes between his teeth, and neglected to wash his hands before eating.

Mind.—Nervousness,²⁹.—Extreme depression of spirits,²⁹.—Constant feeble moaning,²⁵.—Semicomatose state,³².—Lying on back in bed, partially comatose, writhing and twisting himself from side to side, but so prostrated in strength as to be unable to rise or sit up,²⁵.

Head.—[230.] Headache,²⁹.

Eye.—Eyes sunken,²⁵.—Eyes dim and glassy,²⁵.—Edema about eyes,²⁹.—Eyes swollen, in morning,³¹.—Several girls who worked with it were affected. It generally began with an intense pain in the eyes and photophobia. Acute catarrh then followed, accompanied by redness and desquamation of internal surface of eyelids. In some cases there was to be seen on the pupillary body of the lower lid a small round grayish patch, which stuck to the surface, and on being removed caused slight hæmorrhage. The conjunctiva of the upper eyelid never presented this appearance. The inflammatory process caused some thickening of the conjunctiva, and consequently some swelling of the lid. There generally existed at the same time various inflammatory lesions round *alce nasi*,³⁴.—Eyelids somewhat red and puffy,³⁵.

Nose.—Soreness of and running from nose,²⁹.—Nose sore inside, and discharging freely,³¹.

Face.—Paleness of the face,³⁵.—[240.] Countenance had a peculiarly pale grayish appearance,²⁵.—Pinched features,³⁵.—Convulsive twitchings of facial muscles,³².—Lips and nose swollen to double their natural size,²⁸.

Mouth.—Gums tender,³¹.—Tongue white,³¹.—Tongue raw-looking, with portions of its upper surface denuded of epithelium, sore to the touch, and somewhat enlarged in size,³⁵.

Throat.—Soreness of throat and gums,²⁹.

Stomach.—Loss of appetite,²⁹.—Violent vomiting and purging during the previous half hour. He was now cold and clammy to touch, the pulse not perceptible at the wrist, and with all the symptoms of collapse,²⁶.—[250.] Vomited severely a green slimy substance mixed with solid material for upwards of an hour,²¹.—Vomiting and purging, accompanied by pain in the abdomen of a colicky character, and so severe as to be best expressed by the word excruciating,³⁵.—Painful digestion,²⁰.

Abdomen.—Abdomen distended and tympanitic,²⁵.—Almost continual colic,²⁰.

Anus.—Ulcerations of anus,³³.

Stool.—Severe dysentery,³².—Stools passed involuntarily, watery, bilious, and very offensive,³².—Purgings, passed about two quarts of thin, yellow fæces,²⁵.

Respiratory Organs.—Breathing imperfect and irregular, being short and quick, and more slow and gasping, by turns,²⁵.

Chest.—[260.] Weight on chest and difficult breathing,³¹.—Pain, especially on making pressure on lower part of sternum,²⁵.—Pain in chest and crepitation therein,²⁵.

Pulse.—Great weakness and quickness of pulse (120),³⁵.—Pulse very feeble and irregular; for a second or two it would be a succession of minute thrills, so small as to be scarcely perceived, and too rapid to be counted, and then would follow two or three more perfect pulsations,²⁵.—Total imperceptibility of the pulse,²¹.

Inferior Extremities.—Swelling and numbness of legs,²⁰.

Generalities.—Convulsions,³².—Alternations of repose and convulsions (amounting sometimes to perfect opisthotonos),³².—Completely collapsed,²¹.—[270.] Universal lassitude,²⁰.—Debility,²⁹.—Faintness,³⁵.

Skin.—Three had jaundice for more than a fortnight,²¹.—Cloudy purpuric condition of skin, especially marked on anterior surface of the thighs,²⁵.—Eruption began in four or five days in the form of greenish pimples on hands and face; these bursting left holes having eroded edges. Also eruptions on scrotum and groins,³⁰.—Ugly-looking sores on hands, face, and neck, and other parts to which the poison finds access,²⁹.—Sores on various parts of the body, presenting a dark and very unhealthy appearance,³¹.—Vesicles, pustules, *plaques muqueuses*, and ulcerations of the parts exposed to the poison (fingers, toes, genitals, and especially scrotum),²⁴.—The external application causes pustular eruptions on the skin, catarrh, and a painful swelling of scrotum, preceded by a puffiness of the countenance. The internal inhalation causes bloody stools, vomiting, cramps, and delirium,²³.

Sleep.—[280.] Sleep disturbed and unrefreshing.³¹

Fever.—Skin cool,²⁵.—Lips cold and livid,²⁵.—Cold extremities,²¹.—Cold clammy perspirations of an intermittent nature,³⁵.

CUPRUM SULFURICUM.

Authorities. 12, Dr. D. B. Hillis, *Chicago Med. Journ.*, vol. xxvii, 1870, p. 30, Miss W. R., æt. eighteen years, took two spoonfuls blue vitriol in brandy, recovery; (13 to 18; E. W. Berridge, M.D., *U. S. Med. Invest.*, New Ser., vol. iii, 1876, p. 282, with corrections by Dr. Berridge in a letter to the editor); 13, Mrs. — took 2 glob. 100,000th (Fincke) at 8.45 A.M.; 14, Mrs. — took 10 drops 30th cent. in water at 5.55 P.M.; 15, Mr. — took same; 15 a, same, took 10 drops 3d cent. in water; 16, Mr. — took 30th without effect; then several doses of 3d cent.; 17, Mr. — took 3d cent.; 18, Mrs. — took 2 glob. 100,000th (Fincke); 19, J. F. Home, *Brit. Med. Journ.*, 1877 (2), p. 292, two children, æt. six and eight years, ate some wheat soaked in Sulphate of copper.

Head.—Intense pain in head (after five hours),¹².—After rising from bed, pain like a tight narrow band all around head, on a level with upper part of forehead, and feeling as if top of head would come off; this lasted all day, varying in severity; worse on laughing or stooping; relieved by cold wind. It was accompanied by a desire to be quiet (after two days),¹⁷.—[130.] Shooting inward in temples at short intervals, *the left being first affected*, relieved by pressing temples with hands, and causing irritability of temper (after three hours and three-quarters),¹⁴.—Throbbing in left temple (after four hours and a quarter),¹⁴.

Mouth.—Awoke next morning with a metallic taste in the mouth,^{15a}.

Stomach.—Sick feeling in stomach (after three hours and a quarter),¹⁴.—At 9 P.M., after sunset, directly after supper, nausea and once vomiting of food, with much straining; the nausea lasted all night (first day); nausea at times (second day); nausea in the morning (third day),¹⁵.—Obstinate vomiting, food being regurgitated back as soon as taken, of a blue or green color,¹⁰.—Complained of pains, especially in stomach, declaring she was “burning up” (after nine hours); anything like continued pressure on the epigastric region caused great suffering (after nine hours),¹².—Cramps in stomach and bowels (after five hours),¹².

Stool.—This morning diarrhoea as soon as she rose from bed, preceded and attended by griping, lasting all day, frequent (third day),¹⁵.

Heart and Pulse.—Feeling as if there were a throbbing lump in the heart internally; the beating of the heart seemed louder; this lasted five minutes, then went away gradually,¹⁶.—[140.] Pulse full, hard, and 120 per minute (after nine hours),¹².

Inferior Extremities.—Dull, aching soreness in middle of right tibia, felt when walking, not when at rest, with tenderness on pressure,¹⁵.

Generalities.—Convulsions (after five hours),¹².—Severe clonic spasms of the jaws, arms, and legs (after nine hours),¹².

Skin.—Sore pustule in left nose near tip and dorsum (fourth day),¹⁸.

Sleep.—Very restless; did not sleep till 3 or 4 A.M. (first night); slept better (second night),¹³.

Fever.—Heat beginning on dorsa of feet, *first left*, then *right*, then extending up anterior part of legs as far as knees; it lasted thirty minutes and then went off, leaving a sensation as if needles were pricking the parts, for five minutes (after two hours and five minutes),¹⁴.—All night there was coldness *in* and *on* the abdomen (both subjective and objective), and weight, and griping in abdomen; the abdomen was relieved by warmth (first day); abdominal symptoms at times (second day); all day the coldness and weight, but less (third and fourth days),¹³.—All night felt hot, except in abdomen (first day),¹³.—Coldness beginning in small of back, going all over body, then suddenly going into legs, first the left, then the right, with shivering, so that she sat near the fire; this lasted a few minutes (after two hours and a quarter),¹⁴.

CURARE.

Authorities. 4, M. M., Am. Journ. of Hom. Mat. Med., vol. iv., p. 78, a man, æt. thirty years, took Curare (F₂) in water, effects in four days (verified in two provers).

Giddiness as if drunk,⁴.—Light head,⁴.—Pain in back of head,⁴.—Faintness,⁴.

DATURA SANGUINEA.

Datura sanguinea, R. pav.

Natural order, Solanaceæ.

Authority. Tschudi's Travels in Peru (Am. Journ. of Med. Sci., New Ser., vol. xiv, 1847, p. 260), effects on an Indian from a drink prepared from the fruit.

Soon he fell into a heavy stupor; he sat with his eyes fixed vacantly on

the ground, his mouth convulsively closed, and his nostrils dilated. In the course of about a quarter of an hour his eyes began to roll, foam issued from his half-opened lips, and his whole body was agitated by frightful convulsions. These violent symptoms having subsided, a profound sleep of several hours succeeded.

DIGITALIS.

Authorities. **96.** Bull. de Therap., vol. lvi, p. 101 (Brit. and For. Med.-Chir. Rev., 1860 (2), p. 380), a woman, æt. twenty-seven years, for swelling of the limbs, took a large quantity of freshly-expressed juice; (**97** to **100**, Sharp's Essays on Medicine, tenth edition, 1874, p. 717); **97**, 1 drop of 1st (cent.) was taken, repeated after six and twenty-one minutes; **98**, 2 drops tincture (equal to 1 drop of sap of plant); **99**, 6 drops of tincture; **100**, 8 drops of tincture; **101**, Dr. C. Kohuborn, Deutsche Militaire Zeit. (Lancet, 1876 (1), 582), a recruit, æt. twenty-two years, ate Dig. pills for some time to escape service, death; **102**, T. D. Nicholson, M.D., Month. Hom. Rev., 1876, p. 766, experiments; **103**, Dr. P. K. Guild, Pub. of Mass. Hom. Med. Soc., vol. iv, p. 30, Mrs. H., for a cough, drank freely of a tea made of Digitalis instead of Mullein.

Mind.—Intellect destroyed,⁹⁶.—Coma (fifth day),⁹⁶.

Head.—Dizziness,¹⁰¹.—Headache,¹⁰¹.

Eye.—Conjunctiva anæmic,¹⁰¹.—[**1090.**] Dimness of vision,¹⁰¹.

Ear.—Noises in ears,¹⁰¹.

Face.—Face pale,⁹⁶.—Lips anæmic,¹⁰¹.

Mouth.—Gums anæmic,¹⁰¹.—Tongue moist, with grayish-white coating,¹⁰¹.—Tongue thickly coated,¹⁰¹.—Tongue white,⁹⁶.—Breath fetid,¹⁰¹.

Stomach.—Complete loss of appetite,¹⁰¹.—[**1100.**] Heartburn,¹⁰¹.—Frequent singultus,⁹⁶.—Nausea,¹⁰¹.—Very distressing nausea, together with a headache, and flashes of light before her eyes,¹⁰².—Violent sickness (immediately),⁹⁶.—Occasional vomiting,¹⁰¹.—From Wednesday until Saturday night she had not been able to take any food or drink, or to sit up much of the time,¹⁰³.—Epigastrium painful on pressure,⁹⁶.—Great tenderness over the stomach,¹⁰¹.

Stool.—Diarrhœa frequent,⁹⁶.—[**1110.**] Constipation,¹⁰¹.

Urinary Organs.—Decided action on the kidneys, shown in increased secretion (after one hour),⁹⁷.

Sexual Organs.—Menorrhagia,⁹⁶.

Heart and Pulse.—Great commotion of the heart, a great throbbing and pounding, as she expressed it,¹⁰³.—In two experiments with Digitalis tinct., I have observed the pulse slightly retarded, but it fell three beats in an hour after taking 6 drops, in drop doses, every ten minutes, and only two beats after 20 drops in 3-drop doses. In two other experiments the pulse had not varied more than one beat per minute during the hour. The pulse varied so much after taking 1st dil., that no conclusion can be drawn as to its action. The sphygmographic tracings show but little change,¹⁰².—Pulse 72 (before taking); 73 (after two minutes); 74 (after four minutes); 76 (after six minutes); 74 (after ten minutes); 72 (after forty minutes); 66 (after sixty minutes); 64 (after eighty minutes); 72 (after one hundred minutes),¹⁰⁰.—Pulse 64 (before taking); 68 (after five minutes); 72 (after ten minutes); 68 (after fifteen minutes); 64 (after fifty minutes),⁹⁸.—Pulse 66 (before taking); 68 (after two minutes); 67 (after four minutes); 66 (after six

minutes); 67 (after eight minutes); 68 (after ten minutes); 66 (after fifteen minutes); 63 (after twenty minutes); 64 (after twenty-five minutes),⁹⁹.—Pulse 80 (before taking); continued the same for five minutes; 76 (after seven and eight minutes); 78 (after ten minutes); 76 (after twelve minutes); 78 (after fourteen minutes); 80 (after sixteen, twenty, and twenty-one minutes); 76 (twenty-second to twenty-fifth minute); 78 (after twenty-seven and twenty-nine minutes); 80 (after thirty minutes); 83 (after thirty-two minutes); 84 (after thirty-four minutes); 85 (after thirty-six minutes); 84 (after forty minutes); 80 (after sixty-three minutes),⁹⁷.—Pulse slow,⁹⁶.

Generalities.—[1120.] Convulsion,¹⁰¹.—Exhaustion (fifth day),⁹⁶.

Skin.—Skin pale and ashy gray, and parchment-like,¹⁰¹.

DIOSCOREA.

Authority. 8, Olin M. Drake, M.D., Pub. of Mass. Hom. Med. Soc., vol. iv, p. 575.

Had been subject to a dull, heavy pain at the inferior angle of the left scapula occasionally for the past twelve months, otherwise perfectly healthy.

October 29th, at 10 A.M., feeling perfectly well, took 1 grain of the first trit.; ten minutes after had considerable nausea, with rumbling in the cardiac portion of the stomach. 11 A.M., dull headache and nausea, both lasting till 3 P.M. At 3.30 had hard, lumpy stool. 10 P.M., all unpleasant effects had passed away; took 2 grains; fifteen minutes after sharp pain in left side, midway eighth rib, which hinders me in taking a deep inspiration, pain in right foot, base of second toe, passing off on motion, but immediately returning, lasting some six minutes; rumbling in the bowels; forty minutes after cutting pain in the right lobe of the liver, lasting some five minutes.

October 30th. Got up with bad-tasting mouth, tongue coated yellowish white; 10 A.M. took 1 grain; at once considerable nausea, but not so bad as yesterday; half an hour after the dull headache returned, through the temples mostly, lasting till afternoon; 10 P.M. took 2 grains; twenty minutes after pain in umbilicus; in half an hour heaviness in head returns, an aching over right eye.

October 31st. Awoke, after sleeping well, with a horrid headache, so severe it made me reel; back feels weak and sore up and down the spine; whitish-coating on my tongue, with a sickening taste; 11 A.M., feeling well, took 1 grain, producing the usual feeling in my head, but no nausea; head felt bad until after dinner (2.30 P.M.); at 10.30 P.M., took 2 grains; unpleasant feelings through temples, no other effect.

November 1st. In morning, coated tongue; at 10 A.M. took two grains, producing no symptoms; 10 P.M., stool, first part lumpy, then diarrhoea; 10.30 P.M., took 3 grains, with no effect save heaviness in head.

November 2d. Slept well, tongue coated, taste not so bad in my mouth as yesterday morning; 11 A.M., took 3 grains; 10 P.M., soft stool, with considerable pain; 10.30 P.M., took 3 grains, followed by some rumbling in bowels.

November 3d. Slept well; felt sick at the stomach, and cared for no breakfast; at 9 A.M., diarrhoeic stool, with considerable pain in the epigastrium, and cutting pain in rectum; 9.30 A.M., took 4 grains; rumbling in bowels.

November 4th. No symptoms since last dose; 9 A.M., took 6 grains; in fifteen minutes pain in region of gall-bladder; in twenty minutes heaviness of head returned; 10.45 A.M., head symptoms grow worse; great salivation, with a peculiar prickly feeling at the end of the tongue, as though it had been burned with hot drink; eructations from stomach, with a taste like bile.

November 5th. Had a restless night; woke up at 12 o'clock with a severe pain in right lobe of liver, also pain in left side (eighth rib), so severe could not sleep; spinal cord feels bruised all the way up and down; 3 P.M., have had pain off and on during the whole day in left side (eighth rib), in liver, and in left lumbar region; 3.30 P.M., took 14 grains; 10 P.M., severe headache since taking last dose; took 7 grains, producing pain in left side of head.

For a number of days after last dose, occasionally would feel the pains in the left side and in the liver.^a

DUBOISIA.

Duboisia myoporoides, R. Br.

Natural order, Solanaceæ.

Common name, (Queensland) Corkwood tree.

Preparation, Preparations from the leaves.

Authorities. 1, Mr. Gerrard, Pharm. Journ. and Trans., April, 1878, p. 157, Mr. Blake instilled into the eye a solution of the alkaloid; 1a, injected hypodermically $\frac{1}{60}$ of a grain into two patients; 2, J. Tweedy, Lancet, 1878 (1), p. 304, Dr. Ringer injected subcutaneously $\frac{1}{2}$ a grain and 1 grain respectively into two men; 3, Dr. Tweedy, experiments on himself, by instilling into the eye a drop of a solution of the extract (1 in 20); 4, W. W. Seely, M.D., Cincin. Lancet and Obs., 1879, p. 125, 3 or 4 drops of Duboisin (4 grains to 1 ounce) were instilled into the left eye of a lady patient; 5, M. Gaubler, Bull. Gen. de Therap., May, 1878, quoted by Dr. Seely, *ibid.*, an injection was made into a young man suffering from tuberculosis; 6, Galezowski, L'Art. Med., 1879, vol. xlix, p. 149, a person, æt. seventy-three years, operated on for cataract, and suffering from consecutive iritis, with closure of the pupils, could not endure Atropia on account of cerebral symptoms; four months afterwards, after removal of the second cataract, 2 drops of a solution of Duboisin (5 centigrams to 10 grams of water) were put into the eye each day; 7, same, a second case; 8, Wm. F. Norris, M.D., Amer. Journ. of Med. Sci., April, 1879, p. 447, as a mydriatic.

In ten minutes the pupil was widely dilated.¹—The injection caused great dryness of the mouth.^{1a}—I first carefully tested the state of my vision, and found that I could read No. 1½ of Snellen's type distinctly, from four inches (nearest point) to twenty-one inches (farthest point), and V = $\frac{2}{3}$ %. I then placed a single drop of a solution of the extract (1 in 20) within the lids of the tested eye. A little lachrymation followed, but no smarting. Exactly ten minutes afterwards the pupil began to dilate, and the sight became rather misty for near objects. When once started, dilatation proceeded very rapidly, so that fifteen minutes after instillation the pupil was widely dilated, and the nearest point had receded to ten inches. In twenty-five minutes 1½ Snellen could not be read at any distance by the unaided eye, and the accommodation was therefore for all practical purposes com-

pletely paralyzed. By more elaborate tests I discovered that the effect of the extract went on increasing for four hours, when it attained its maximum. Twenty-four hours afterwards there was no appreciable amelioration, either in the pupil or the accommodation, but within the next twenty-four hours the effects began to pass rapidly off, so that forty-eight hours after the instillation I could see $1\frac{1}{2}$ Snellen from five and a half inches to twenty one inches, although the pupil was not much smaller, and reacted slightly to light. From this time the accommodation became stronger and more active every hour, and the pupil gradually diminished until it reached its natural size. Four days after the application the accommodation was restored, and three days later the pupil was active and of its normal size.³

CASE I.—Dr. J. W., æt. twenty-five years, whose left eye had been last year carefully examined under Atropia, and found to have a hypermetropic astigmatism of $\frac{1}{60}$. With this corrected, his vision was $\frac{20}{xx}$ and his near point $4\frac{1}{3}''$. Three minute drops of a 4-grain solution of Sulphate of duboisia were instilled into the conjunctival sac of the left eye. In six minutes the pupil had commenced to dilate, and was ovoid, with its long diameter at 50° . At nine minutes pupil is nearly round, and measures 6 mm., and he can read Jæger VI inside of $20''$. At twelve minutes is unable to read without convex glass, and with $+\frac{1}{10}$ half an inch in front of the cornea cannot bring Jæger I inside of $8\frac{3}{4}''$. At thirteen minutes pupil measures 7 mm., and is immobile; at fourteen minutes with $+\frac{1}{10}$, punctum proximum is at $9\frac{1}{2}''$. At fifteen minutes pupil dilated ad maximum, and measures 8 mm. At eighteen minutes with $+\frac{1}{10}$ Jæger I from $9\frac{1}{2}''$ — $13''$, sharpest at $11\frac{1}{2}''$. At twenty minutes the same. At twenty-five minutes $+\frac{1}{60}$ Cy. axis at $15^\circ V = \frac{20}{xx}$, and with $+\frac{1}{10}$, combined with same cylinder Jæger I, from $9''$ — $12\frac{1}{2}''$, best at $9\frac{1}{2}''$. He was examined at thirty-five and forty-five minutes, but there was no further change either in the size of the pupil, acuity of vision, or in the range of accommodation. He complains of dizziness on rising to walk, feels as if his legs would give way under him, and of slight dryness of the throat. Twenty-four hours after the application with $+\frac{1}{10} + \frac{1}{60}$ Cy., near point at $9''$. In forty-eight hours, with same glass, near point of $6\frac{1}{4}''$, and pupil has contracted to $6\frac{1}{2}$ mm. On the third day, with same combination, near point is at $5\frac{1}{2}''$, and without a glass can read Jæger I up to $9''$. On the fourth day, with his cylinder alone, near point is at $5''$. On the sixth day, with his cylinder, the near point is at $5''$, pupil measures 3 mm., while that of the other eye measures only 2 mm. On the ninth day pupil is still a trifle larger than that of the right eye, and with his cylinder the near point is at $4\frac{3}{4}''$.

CASE II.—Miss M. K., æt. twenty-six years, $V = \frac{20}{xx}$ in each eye, and reads Jæger I from $5''$ — $18''$. Two drops of a 4-grain solution of the Sulphate of atropia were dropped into the left eye, and as soon as practicable thereafter a similar quantity of a 4-grain solution of Sulphate of duboisia into the right eye.

Right Eye.—Duboisia. In five minutes the pupil is vertically ovoid and irregular; in response to change of light and shadow the least dilated portions show the most movement. It measures $4\frac{1}{2}$ by 7 mm. At ten minutes it is firmly contracted everywhere, except at temporal side, and is irregularly round. At twelve minutes it has contracted evenly all around, and measures 8 mm. At eighteen minutes can read Jæger XIX with effort,

at arm's length, $V = \frac{20}{1xx}$, and sees horizontal lines best. With $+ \frac{1}{10}$ reads Jæger I from $10\frac{1}{2}'' - 12\frac{1}{2}''$. In one hour and a half $V = \frac{20}{1xx}$, with $+ \frac{1}{48}$ $\frac{20}{xx}$; sees all lines in Green's dial alike, and rejects cylinders. With $+ \frac{1}{10}$ Jæger I, from $11'' - 13\frac{1}{2}''$. The instillation was repeated on the following day; patient picked out $+ \frac{1}{36}$; and again, on the third day, when she preferred $+ \frac{1}{42}$. She then returned home, and I did not see her for twelve days, but she informs me that on the evening of the second day, after the last instillation of Duboisia, she could spell out for a moment newspaper print. Twelve days after the last application the pupil in strong light measures $1\frac{1}{2}$ mm., and with her correcting glass $+ \frac{1}{4}$, could read Jæger I, from $5\frac{1}{2}'' - 18''$.

Left Eye.—Atropia. At eleven minutes pupil ovoid and responsive to light, 5 by 3 mm. At fifteen minutes nearly round, 5 mm., with scarcely perceptible motion. At eighteen minutes can read with difficulty Jæger I. At twenty-three minutes pupil 8 mm.; can still read Jæger I at $11''$. At thirty minutes can no longer read "brilliant," but spells out Jæger II. At thirty-five minutes Jæger IV, with difficulty, at $11''$, and with $+ \frac{1}{10}$ Jæger I, from $6'' - 9\frac{1}{2}''$. In one hour and a half $V = \frac{20}{1}$, and with $+ \frac{1}{10}$ reads Jæger I, from $9'' - 12''$; pupil measures 8 mm. The instillation was repeated on the following day, and with $+ \frac{1}{10}$ patient could read Jæger I, from $10\frac{1}{2}'' - 12''$; and again, in the third day, with the same result. She says that with this eye she could not spell out any newspaper print until the morning of the fifth day after the last instillation of Atropia. Twelve days after this pupil measured in strong light $2\frac{1}{2}$ mm., and with her correcting glass $+ \frac{1}{42}$, reads Jæger I, from $5\frac{1}{2}'' - 16''$.

CASE III.—Spasm of the ciliary muscle in a young girl, M. C., æt. thirteen years. She complains of being nearsighted, and obliged to hold her book too close, with inability to see the blackboard at school. At present V in each eye $\frac{5}{cc}$, and reads Snellen $1\frac{1}{2}$ from $3\frac{1}{2}'' - 7''$, and not at any point further off. Nevertheless, after a short sojourn in a dark room, ophthalmoscopic examination shows that the eye is nearly emmetropic, and the fundus can be seen sharply without any glass. Three drops of a 4-grain solution of Sulphate of duboisia were therefore instilled into each eye. The pupils commenced to dilate in eight minutes; in eleven minutes they were vertically ovoid; in eighteen minutes ovoid, sluggish, but still mobile; at twenty minutes they were nearly round, and V had risen to $\frac{20}{c}$. In twenty-six minutes pupils absolutely immobile and round, and with $+ \frac{1}{10}$ read Snellen $1\frac{1}{2}$ from $7'' - 9''$. In fifty-five minutes $V = \frac{20}{1xx}$, and with $+ \frac{1}{10}$ Snellen $1\frac{1}{2}$ from $9\frac{1}{2}'' - 10\frac{1}{2}''$. In sixty minutes with $+ \frac{1}{48}$ $V = \frac{20}{xxx}$, and in sixty-eight minutes with $+ \frac{1}{10}$ Snellen $1\frac{1}{2}$ from $11'' - 12''$. Three days later her accommodation was $\frac{1}{16}$.

CASE IV.—By means of a No. 1 Bowman's probe, I succeeded in placing a small ball of the viscid material (Sulphate of duboisia), about half a millimeter in diameter, in the lower cul-de-sac of the conjunctiva. It caused no irritation or pain, but the patient complained of being dizzy, and feeling as if the room was going around. This soon passed off, and there was no further disagreeable effect. It failed, however, to tear the adhesions between the iris and capsule.

CASE V.—The patient, J. W., was a healthy girl of eighteen years, and, as in the previous case, an exceedingly minute piece of the Sulphate of du-

boisia, in substance, was held for a few moments in the retrotarsal fold of the lower lid, until most of it was melted; the probe was then withdrawn, and the superfluous tears saturated with it, pressed out of the eye, and received in a soft handkerchief. A few minutes after I called the patient to examine the state of the pupils, and she complained of feeling dizzy, and very soon after my attention was attracted by the dark flush of her face. She was then mildly delirious, pulse 132, and was laid on a sofa. She had a tendency to pick at surrounding objects, and had one or two slight drawings up of the arms, and was very restless. A thermometer under the tongue, when the pulse was most rapid, showed a temperature of $100\frac{1}{2}^{\circ}$. No treatment was instituted, and in an hour and twenty-five minutes the pulse had fallen to 100. She now became again more excitable, and tried to get up off the sofa. On being told to keep quiet, she would at once lie down again, but in a few minutes more again try to rise and move off. A subcutaneous injection of $\frac{1}{4}$ of a grain of Sulphate of morphia was now given, and in about twenty minutes she went gently to sleep. An hour later she was roused to be conducted to her bed in the upper ward, and was able to walk upstairs with but little assistance. She again fell asleep, and about half an hour subsequently awoke rational. The nurse reported, however, that once or twice during the night she got up out of bed, but lay down immediately on being admonished by her. Next day she had entirely recovered.⁸—In four minutes near vision growing poor, and in five minutes Nos. 6 and 7 Jæger had to be held at nearly arm's length, and the patient complained of intense fainting symptoms. Very slight nausea. The "strange" feelings in the head and faintness continued very marked for fifteen or twenty minutes, when the worst "fainting" features passed away, the "strange" feelings remained very marked, and "drowsiness" came on. In from one-half to three-quarters of an hour there was dryness of the mouth and throat, though not very marked, and chilliness was complained of. During the next day there was marked faucial and oral dryness, some of the "strange" feeling in the head, and flushing of the face. On the second day she felt nearly well, some little sensation that she seemed to locate in the stomach, the head symptoms having about disappeared.⁴—In both, the pupils became widely dilated and the mouth dry. After the larger dose the man's throat became so dry that he could scarcely speak. The dryness lasted five hours. Both became rather sleepy in about fifteen minutes after the injection, the drowsiness lasting about two hours. The man with the larger dose complained of some general weakness, and both men suffered from headache, lasting about three hours. After the larger dose the pulse rose from 66 to 120 per minute.²—In a few minutes vertigo, then dryness of the throat, then slowing of the pulse. After the slowing of the pulse the patient fell into a sort of stupor, analogous to that produced by *Datura stramonium*. This stupor lasted many hours; it was not sleep, for if the patient was questioned he replied, though with difficulty it is true; he remained seated in his chair, and appeared indifferent to what was going on about him, and without any energy to move.⁵—A woman, æt. fifty-eight years, with double chronic iritis, on account of conjunctivitis from *Atropia*, was prescribed Duboisin. The poisonous effects were slow in appearing, were characterized by frequent desire to sleep, preventing the patient from continuing her work. Heaviness of all the limbs, especially of the lower extremities. Gastric symptoms and complete loss of appetite.⁷—The poisonous effects observed were characterized by general trembling, the patient was unable

to hold up the head; hallucinations and nausea. These symptoms disappeared on stopping the Duboisia,⁶

DUBOISIA HOPWOODI.

Duboisia hopwoodi, Von Mueller.

Natural order, Solanaceæ.

Common name, (Native) Pituri.

Authority. Dr. Sidney Ringer, *Lancet*, April, 1879 (*Am. Journ. Med. Sci.*, April, 1879, p. 539).

From twelve observations made on man, he finds that it produces faintness, pallor, giddiness, tremor, hurried and superficial breathing, increased frequency of pulse, perspiration; in larger doses salivation, drowsiness, convulsive twitchings, spasmodic rigidity of the extremities; in small doses, internally administered, it contracts, in large it widely dilates the pupils; locally applied, it contracts and then widely dilates the pupils.

Mr. Tweedy saw the patients, and examined the eyes while under the influence of Pituri. He reports as follows:

"I have little to add to your account of the effect on the eye of the local application of a solution of Pituri, except to note that, although the pupil was widely (not fully) dilated, the accommodation was almost unaffected. The patients could read well, and they did not complain of much mistiness. Except the smarting, a weak solution of Atropia, say $\frac{1}{30}$ grain to an ounce, would produce the same symptoms as the one per cent. solution of Pituri."

DULCAMARA.

Authority. 33, Dr. Benjamin Phillips, *Lond. Med. Gaz.*, 1839-40 (1), p. 904, effects of daily doses of a pint and a half.

In some cases lepra, nausea, and headache,³³

EAUX BONNES.

The sulphur springs at Eaux Bonnes, in France.

In 16 ounces: Sodium chloride, 2.6289 grains; Magnesium chloride, 0.0338; Potassium chloride, traces; Calcium sulphate, 0.8586; Magnesium sulphate, 0.0960; Calcium carb., 0.0368; Silica and Iron, 0.1228; Organic sulphurous matter, 0.8179; H₂S, 0.183 cubic inches; CO₂, 0.130; N, 0.445.

Authority. Edouard Cazenave, M.D., *Recherches Clin. sur les Eaux Bonnes* (*Med. Times and Gaz.*, 1854; *New Eng. Med. Gaz.*, 1876, p. 302), general effects.

After taking the Eaux bonnes a few days, they produce a feeling of heat and constriction in throat and trachea, a slight difficulty of deglutition, and at the same time the fauces are red and highly injected. The digestive and secretive organs are quickened and increased; the circulatory and nervous functions partake of the excitement; there is restlessness and sleeplessness, while the intellectual faculties are roused to unwonted power and activity. The cutaneous exhalations are increased and have a sulphurous odor.

ECHITES.

Echites suberecta, Jacq.

Natural order, Apocynaceæ.

Authorities. 1, Lunan, quoted by W. Hamilton, *Pharm. Journ.*, vol. vi, 1847, p. 23, a negro woman gave the milk to a medical practitioner in Jamaica; 2, Barham, quoted by Hamilton, a negro used a piece of the stem to stop a jar of rum, which was left in that condition, and with some leaves which had dropped in, all night; the negroes drank of the rum in the morning.

Violent griping, nausea, and loss of appetite, followed by convulsive twitchings in various parts of his body, hectic fever and emaciation. It was a long time before the disposition to spasm was wholly subdued.¹—In the course of a few hours they were seized with violent vomiting and tremors. When the owner of the plantation arrived he found some dead and others just expiring. The juice expressed from the Arrowroot was administered with the happiest effect.²

EMETINUM.

An alkaloid from Ipecacuanha-root, $C_{40}H_{30}M_2O_{10}$.

Authority. Magendie and Pelletier, *Am. Med. Recorder*, vol. i, 1818, p. 109.

One of us swallowed 2 grains upon an empty stomach; three-quarters of an hour afterwards he felt sick at his stomach, and vomited several times, followed by marked inclination to sleep. Several students submitted to these trials, and were affected in the same way.

EQUISETUM.

Authorities. 5, J. H. Carmichael, M.D., *U. S. Med. Invest.*, New Ser., vol. viii, 1878, p. 162, took 6 drops tincture at 2.30 P.M., 10 drops at 5.30, and 12 drops at 10.30 (first day); 5 drops, then 10 drops twice (second day); 8 drops Verat. vir. to half a glass of water, fifteen minutes apart, at 9 P.M. (third day); 6, second proving, took two doses of 10 drops each, and two of 12 drops each (first day); four doses of 10 drops each (second day); 20 drops (third day).

Head.—Slight neuralgic pains in different parts of the head, more frequent in left temporal region (first night).⁵—Dull heavy headache (second day).⁵

Mouth.—Increased flow of saliva, causing frequent desire to swallow (first night).⁵

Stomach.—Great acidity of the stomach for the last two days (fourth day).⁶—Much wind in stomach (first night).⁵—Slight uneasiness in epigastric and right hypochondriac region (after second dose); more decided (after third dose).⁵—Great deal of uneasiness about stomach (fourth day).⁶—Decided burning over the epigastric region (second day).⁶—[190.] Epigastric and umbilical regions painful (second day).⁵—Pain in region of pyloric orifice of the stomach (second day).⁶—Heavy pressing pain in stomach, commencing about one hour after each meal, and continuing about two hours (fifth day).⁶

Abdomen.—Bowels feel as though diarrhœa were about to set in (fourth day),⁶.—On pressure in hypogastric region, I find much soreness (fourth day),⁶.

Urinary Organs.—Decided heavy pain over right kidney (second day),⁶.—The most prominent symptom is great soreness over the region of the kidneys, worse upon the right side (second morning); continues (third day),⁶.—Partial suppression of urine (second day),⁶.—Frequent calls to urinate; urine has an ammoniacal smell (third day),⁶.—While at a sociable, had frequent desire to pass water, with severe cramplike pain in hypogastric region, which was somewhat relieved on passing water, but soon returned, lasting about two hours from its commencement until it disappeared (fifth evening),⁶.—[200.] Decided diuretic effect, with slight pressure in vesical region; dull heavy aching over the region of the left kidney, with sharp pain in the left hypochondrium; could not sleep the first part of the night on account of dull heavy pain over both kidneys (second day); uneasiness in right kidney (third day); kidneys still feel sore; frequent calls to urinate, quite a large quantity passed each time (fifth day),⁶.

Chest.—Very severe pain in right lung between fourth and fifth ribs (second day); not so severe (third day),⁶.—Have had very severe pain in right pectoral region all day, but much worse this evening; cannot fill my right lung with air, it causes such severe pain; worse in morning; 9 P.M. it seems as though both lungs were becoming congested; very difficult respiration, 8 drops of Verat. vir. to one-half glass of water, three doses fifteen minutes apart; can respire much easier (third day); passed a restless night; had to lie on my back till about midnight, as I could not lie on my side; after midnight rested easiest on affected side partly curled up; seems as though about thirty-six square inches of surface beneath right nipple was very much inflamed; worse on inspiring, causes pain in stooping to right side to lift anything from the ground, also in putting my right arm over my head; think it is the pleura that is affected (fourth day); pain on inspiration continues in right thorax between fourth and fifth ribs; worse on bending to the left, but not as bad as yesterday (fifth day),⁶.—Occasional sharp shooting pains through both lungs (fourth day),⁶.—Much soreness about thorax (fifth day),⁶.

Pulse.—Pulse accelerated about 10 beats per minute (second day); pulse 100 (third day),⁶.

Neck and Back.—More or less stiffness of muscles of the neck, (second day),⁶.—Pains in both scapular regions, worse through the left (first night); continues in the left (second day),⁶.—Left scapular region very sore on movement of left arm (third day),⁶.—Soreness in right scapular region (third day),⁶.—[210.] Feeling much better, but am reminded I have a back quite often by the pain caused by movement,⁶.

Generalities.—More or less uneasiness in different parts of the body (second day),⁶.—General malaise (second day),⁶.—Decided stiffness of all the muscles of the trunk (third day),⁶.

Sleep.—Constantly changing position; intermittent sleep (first night); restless night (third night),⁶.

ERIODICTYON.

Name *Eriodictyon glutinosum*, Benth., is now restored, notice correction of spelling.

Authorities. **4**, Dr. Scudder, Eclectic Med. Journ., Nov., 1875 (U. S. Med. Invest., New Ser., vol. iii, p. 563); **5**, O. W. Lounsbury, M.D., Cincin. Med. Advance, vol. iv, 1876, p. 134, in good health, took 5 drops tincture at 7 A.M., 10 at 1 P.M., 15 at 6 P.M. (first day); 30 drops at 7.30 A.M., 50 at 1.15 P.M. (second day); 75 at 6.30 A.M. (third day); 100 at 7.45 A.M. (fifth day); 160 at 12.20 P.M. (tenth day); all the doses were taken on an empty stomach.

Mind.—During the day great exhilaration; unusually elastic step (third day).⁵—Daily duties performed mechanically rather than otherwise (twenty-ninth day).⁵—[**40.**] Forgetfulness (seventh day).⁵.

Head.—Headache (twenty-fourth day).⁵—Severe headache (seventh and twenty-ninth days).⁵—Oppressive headache (after one hour and three-quarters, fifth day).⁵—Headache, which had subsided during the night, has returned with increased violence (after two hours, third day).⁵—General distressed feeling in head (seven hours after second dose, second day).⁵—Dull frontal headache (after two hours).⁵—Darting pain in forehead from left to right (after second dose, second day).⁵—For thirty-six hours past painful frontal headache (twenty-third day).⁵—Was seized in fifteen minutes with heavy frontal headache, which continued the next day (after ten days).⁵—[**50.**] Flying pains in left hemicrania (seven hours after second dose, second day).⁵.

Eye.—Aching of eyes on reading (seven hours after second dose, second day).⁵.

Nose.—Sneezing (seven hours after second dose, second day).⁵—Symptoms of approaching coryza (after second dose).⁵—Coryza (seven hours after second dose, second day).⁵.

Mouth.—Tongue and mouth felt slightly scalded (second day).⁵—Yellow streak along centre of tongue (after five hours and a half, second day).⁵.

Throat.—Occasionally small discharge of jellylike mucus from posterior nares (second day).⁵—Dryness of posterior nares (after third dose).⁵—Irritation of posterior nares, sticky mucous discharge downward into throat, constant hawking, some irritation of fauces (twentieth day).⁵—[**60.**] Irritation of posterior nares, fauces, and larynx (twenty-eighth day).⁵—Great dryness of the throat (after second dose).⁵—Dryness of fauces (after third dose).⁵—Catarrh of fauces and larynx (twenty-third day).⁵.

Stomach.—Loss of appetite (nineteenth day).⁵—Food taken without relish (twenty-ninth day).⁵—Eructations (seven hours after second dose, second day).⁵—Nausea, which soon passed away (ten minutes after third dose).⁵—Nausea (immediately after second dose, second day).⁵—Nausea, with severe pressing frontal headache (after eleven days).⁵—[**70.**] Nausea, with looseness of bowels (twenty-sixth day); nausea for two days past on taking the least food, followed by sensation of repletion (twenty-eighth day).⁵—Unusual fulness and distension in the epigastrium, with rumbling in the bowels (after two hours, second day).⁵—Greatly increased feeling of distension of stomach and bowels, though no real distension is apparent (after seven days).⁵—Feeling of repletion after taking a few mouthfuls of food (nineteenth day).⁵—Oppressive sensation in cardiac region (after second dose, second day).⁵—Slight pains in epigastrium (after two hours).⁵—Sharp pains in stomach (after four hours, fifth day).⁵.

Abdomen.—Flying pains in left hypochondrium (seven hours after second dose, second day).⁵—Sharp transitory pains in umbilical region

(seventh day),⁵.—Sensation of great distension of abdomen continuing for thirty-six hours (after two hours, third day),⁵.

Rectum and Anus.—[80.] Have had for twenty-four hours past a feeling of relaxation of external anal sphincter, with cool moisture of anus (seventh day); increased anal relaxation (eleventh day),⁵.—Partial prolapsus ani (after eleven days),⁵.—Very disagreeable relaxation of anus and rectum; prolapsus ani worse (twenty-first day),⁵.

Stool.—Unusual normal evacuations (second day),⁵.

Respiratory Organs.—Catarrhal symptoms increase (twenty-sixth day); bronchial catarrh (twenty-eighth day),⁵.—In two hours some constriction of larynx, sensation as if something pressed on the trachea near the suprasternal notch, pain and constriction extending to the clavicle in the direction of axilla, dryness of throat and air passages. The constriction and dryness of the larynx continued for three days distinctly, gradually wearing away.⁴.—Irritation of larynx and trachea (twenty-third day),⁵.—The prover has had ever since the proving an increased sensitiveness of larynx and trachea to changes of the atmosphere, and also to the use of the vocal organs, either of which causes or provokes a paroxysm of coughing (after three months),⁵.—Constant tickling cough (twenty-third day); cough severe, worse at nightfall (twenty-fourth day),⁵.—Aggravated cough (twenty-ninth day),⁵.—[90.] Cough night and morning (after eight weeks),⁵.—Expectoration of thick white mucus (twenty-eighth day),⁵.—Frequent sighing respiration (nineteenth day),⁵.

Chest.—Constant heavy feeling in chest behind sternum (nineteenth day),⁵.—Sensation of a heavy weight on the chest (twenty-third day); great heaviness in chest (twenty-fourth day),⁵.—Heaviness in chest which requires an occasional deep breath to relieve (after eight weeks),⁵.

Heart and Pulse.—Slight pain in the præcordial region (after one hour and a half),⁵.—Pulse 67 (before the proving); pulse accelerated 10 beats, accompanied with a peculiar nervous sensibility (after one hour and a half, first day); 75 (after two hours); 65 (after second dose, second day); 79 (after two hours, third day); 70 (fourth day); 76 (after one hour and three-quarters); 68 irregular (after four hours, fifth day),⁵.—Pulse 68, regular, but weak (seventh day),⁵.

Neck.—Rheumatic pain in right sterno-cleido-mastoid muscle (after two hours),⁵.

Extremities.—[100.] Flying pains in upper and lower extremities (seven hours after second dose, second day),⁵.

Superior Extremities.—Pain now and then along the ulnar nerve (fourth day),⁵.—Pain in ulnar and radial sides of left forearm (seventh day),⁵.—Transitory pains in right index-finger (after third dose),⁵.

Inferior Extremities.—In three hours severe pain in left knee, with difficulty in using the leg; aching of the muscles of both legs; continuing during afternoon and evening.⁴.

Sleep.—Troubled dreams (first night),⁵.—Groaned much in sleep, which is very unusual (second night),⁵.—Restless sleep, with frequent turning (nineteenth day),⁵.—Moaning during sleep, and tiredness on waking (twenty-third day),⁵.

ERYTHROPHLÆUM.

Erythrophlæum guinense, G. Don.

Natural order, Leguminosæ.

Preparations. From the bark.

Authorities. 1, Drs. Mitchell and Hammond, Charleston Med. Journ. and Rev., vol. xiv, 1859, p. 734, took 4 drachms of the saturated tincture at 11 A.M., 2 and 5 P.M.; 1 a, same, two days later took 1 ounce of the tincture at 10 A.M.; 2, Bowditch's Ashantee, p. 279 (Berridge's Collection, New Eng. Med. Gaz., vol. xi, 1876, p. 306), infusion of the bark; 3, New Eng. Med. Gaz. ibid. (Berridge), effects of the dust of the bark; 4, Robert Christison, Pharm. Journ., vol. xiv, 1854-55, p. 471 (called here Fillœa), effect of 1 or 2 grains of the bark.

Head.—Slight dizziness (in one hour),¹.—Headache,^{1a}.

Face.—Face flushed,^{1a}.

Nose.—When inhaled by the nose it causes long-continued spasms of sneezing, with distress about the forehead and eyes.¹

Mouth.—When a grain or two of the bark is tasted it causes slowly an intense numbness and tingling of the part of the tongue to which it is confined,⁴.

Stomach.—Slight nausea,^{1a}.—It operates instantly and convulsively as a most violent emetic,².

Stool.—Bowels slightly loose and some griping (after first dose); somewhat constipated (second day),¹.

Pulse.—Pulse 91 (before experiment); 83 (in one hour); 93 (in two hours); 80 (in four hours); 93 (in eight hours),¹.—[10.] A decline in the rapidity and force of the pulse,^{1a}.

Generalities.—Lassitude,^{1a}.—A pleasant lassitude, a desire for quiet, and an indisposition for either mental or physical exertion,¹.

ESERINUM.

(Phystostigmin.) An alkaloid of the Calabar bean. $C_{30}H_{20}N_3O_4$.

Authority. Dr. A. Von Reuss, Am. Hom. Obs., vol. xv, 1878, p. 195, effects on the eye.

Leopold Grossegger, æt. sixteen years. In left eye a traumatic cataract. With right eye reads No. 40 Sn. at 15 feet, with convex 16 the same, with concave cyl. axis vert., reads No. 30, the measurement before application of drug gave $r = 7.5150$. Three drops from a 1 per cent. sol. were applied, and the following results obtained: Hm $\frac{1}{24}$ S $\frac{1}{4} \frac{5}{0}$ (after five minutes); m $\frac{1}{16}$ S $\frac{1}{4} \frac{5}{0}$ (after ten minutes); $r = 7.5205$; m $\frac{1}{10}$ (after fifteen minutes); $r = 7.4435$ (after twenty minutes); m $\frac{1}{8}$ (after twenty-five minutes); $r = 5.44625$ (after thirty minutes); m $\frac{1}{10}$ (after thirty-five minutes); $r = 7.4270$ (after forty minutes); m $\frac{1}{9}$ (after forty-five minutes); $r = 7.4265$ (after fifty minutes); m $\frac{1}{12}$, immediately thereafter m $\frac{1}{4}$ (after fifty-five minutes); $r = 7.4435$ (after sixty minutes); m $\frac{1}{20}$ S $\frac{1}{8} \frac{5}{0}$, directly afterwards m $\frac{1}{60}$ S $\frac{1}{8} \frac{5}{0}$ (after sixty-five minutes); $r = 7.4105$ (after seventy minutes); emmetropia (after seventy-five minutes); $r = 7.42425$ (after eighty minutes); Hm $\frac{1}{30}$ (after eighty-five minutes); $r = 7.47375$ (after ninety minutes); Hm $\frac{1}{60}$ S $\frac{1}{4} \frac{5}{0}$, same with + 18 cyl. axis vert. (after ninety-five minutes); $r = 7.515$ (after one hundred minutes); Hm $\frac{1}{24}$ S $\frac{1}{4} \frac{5}{0}$, also with + 18 c. ax. vert. (after one hundred and five minutes); $r = 7.5277$ (after one hundred and ten minutes); Hm $\frac{1}{24}$ S $\frac{1}{4} \frac{5}{0}$, also with + 18 c. ax. vert. (one hundred and fifteen minutes); $r = 7.5205$ (after one hundred and twenty minutes). Pupil at close of measurement still very small. Extreme tension in bulb, and for some time sensations of pain. No headache. The increase of radius during first five minutes is due to a

failure in measurement. From this point it diminished rapidly and reached its maximum in seventy minutes. Entire difference 0.1 mm. The increase was slower, and required one hundred and ten minutes to return to the normal. The greatest increase of the refraction up to $m \frac{1}{5}$ amount to $\frac{1}{5} \cdot \frac{1}{8}$ refracting value, and occurred at the 40th minute. At the close of the experiment, after two hours, the refraction was still normal.

Joseph Stichanel, æt. forty years. Left eye. Emmetropic S $\frac{2}{3}$. Two measurements before use of sol., gave $r = 7.625$. When one application of 1 per cent. sol. was made, and measurements taken, at first every five minutes, later every ten, in intervals vision tests were applied. After first five minutes the pupil was already smaller, and after twenty was very small. $R = 7.61675 \text{ m } \frac{1}{20}$ (after five minutes); $r = 7.61675 \text{ m } \frac{1}{4}$ (after ten minutes); $r = 7.62675 \text{ m } \frac{1}{10}$ (after fifteen minutes); $r = 7.62509 \text{ m } \frac{1}{5}$ (after twenty minutes); $r = 7.61675 \text{ m } \frac{1}{12}$ (after twenty-five minutes); $r = 7.62675 \text{ m } \frac{1}{4}$ (after thirty minutes); $r = 7.60575 \text{ m } \frac{1}{4}$ (after thirty-five minutes); $r = 7.62675 \text{ m } \frac{1}{4}$ (after forty minutes); $r = 7.53425 \text{ m } \frac{1}{4}$ (after forty-five minutes); $r = 7.57825 \text{ m } \frac{1}{8}$ (after fifty-five minutes); $r = 7.60025 \text{ m } \frac{1}{20}$ (after sixty-five minutes); $r = 7.62675 \text{ m } \frac{1}{20}$ (after seventy-five minutes); $r = 7.62500 \text{ m } \frac{1}{40}$ (after eighty-five minutes); $m \frac{1}{60}$ (after ninety minutes).

The action here is not so satisfactory as in the previous case, a marked sinking of radius being first noticed after the 40th minute, but suddenly. Up to this time the changes are minimum. The maximum of diminution is 0.09 mm., and remains at this only a few minutes. The increase took place more slowly, and after seventy-five minutes the primary value is again reached. The increase of the refraction began immediately after the application, increased gradually until at the 20th minute the highest point was reached with $m \frac{1}{5}$ (refracting power $\frac{1}{5}$), then declined very slowly, so that after ninety minutes there exists a myopia of $\frac{1}{60}$.

Experiments three and four not being very satisfactory in results, I will not introduce them. Will, however, say that in number three the twitching and pain of a tearing character were quite marked during early part of experiment.

ETHER.

Authorities. 42, W. H. Hewitt, *Lancet*, 1847 (1), p. 239, Jemima S., æt. nineteen years, inhaled it for six or seven minutes for the purpose of having a tooth extracted; 43, Anne C., æt. fourteen years, inhaled it two minutes for the same purpose; 44, R. Stewart, *ibid.*, p. 397, death of a woman after the third inhalation; 45, M. Cardan, *ibid.*, p. 411, effects on a woman in the sixth or seventh month of pregnancy; 46, Berridge, *Organon*, vol. ii, 1879, p. 260, a man, æt. twenty years, inhaled pure Ether.

Mind.—Hysterical (after first inhalation),⁴⁴.—Hysteria preceded the insensibility, and occurred at intervals during the day,⁴².—[260.] Disorderly hilarity,⁴⁵.—On recovering, she exclaimed, "Oh, why did you take me from that beautiful place? Let me go back. Oh! how beautiful! It is heaven!" and a variety of other rapturous expressions, evidently showing that she had had a dream, and was unconscious of any operation having been performed upon her,⁴².—When recovering, on asking her why she had kept the mouth so tightly shut, she said she had had a dream, and thought she was drowning, and that somebody was forcibly trying to open her mouth,⁴³.—Insensibility,^{42 43}.

Head.—Headache for many hours (after second inhalation),⁴⁴.

Eye.—Power of vision lost (after second inhalation),⁴⁴.

Generalities.—After ten or twelve respirations, the infant made some struggles and convulsive movements, very painful to the mother; these movements became more violent, and succeeded each other with greater rapidity, in proportion as the Ether became absorbed; but as the mother grew insensible at the same time, she evinced only a vague kind of consciousness. When the mother recovered herself from the effects of the Ether, she complained of pain in the uterine region, such as might arise from blows and bruises,⁴⁵.—The heart of the fœtus beat with extreme rapidity, so that the individual pulsations could scarcely be distinguished; it might be said, indeed, to be in constant tremor. The rapidity of the pulsations appeared to be in pretty direct relation to the motions or struggles of the child. The placental bruit lost its simple character, and took place in fits, which varied according as the struggles of the fœtus were more or less rapid,⁴⁵.—Faintness and apprehension at once,⁴⁶.

EVONYMUS EUROPÆUS.

Authority. 2, Prakt. Mittheil. d. corresp. Gesellsch. hom. Ärzte, Jahrg., 1827 (Noack and Trinks.)

Mind.—Morose mood,².—Peevishness,².—Fretful humor,².—Disinclination to work,².—Loss of ideas,².—Vanishing of thought on exerting the mind when reflecting about anything, and ill-humor thereat,².

Head.—Great vertigo, whirling sensation in the head, especially in the forehead, aggravated while sitting,².—Headache with great chilliness,².—[10.] Pressing pains in the forehead,².—Violent pressure in the forehead between the eyes, at one time becoming ameliorated, at another ceasing entirely,².—Painful drawing from the left side of the frontal bone to the malar bone,².—Drawing pains in the forehead,².—Tension above the skin of the forehead, at times a convulsive drawing back and forth,².—Pressing pains in the temples,².—Pressure on the right temporal bone,².—Persistent and increasing pain in the left temporal bone,².—Feeling as if a nail were pressing into the head on the right side, near the vertex,².—Stitches in the head, now in the right, now on the left side, now in both sides at the same time, not aggravated by touch,².—[20.] Violent deep stitches at one time very low down in the occiput at the right side, at another in the left frontal eminence, now in the right temple, then in the right parietal bone, then in the left, then the right temporal bone, as far as the mastoid process,².

Eye.—Pressure in the eye, aggravated by external pressure,².—Pressing pain in the eye,².—Excessive pressure upon the eyebrows, when most violent the eyeballs seem compressed, and are very painful,².—Benumbing pressure above the right orbit,².—Obscuration of vision,².—Mist before the eyes, seeming to be in a tremulous motion, with some vertigo,².—Dark spots before the eyes,².

Ears.—Roaring in the ears,².

Face.—Drawing pain in the face,².—[30.] Tearing pain in the face,².—Tearing in the left side of the face, especially of the frontal bone,².—Paralytic pain in the right malar bone,².—Pressing pain in the malar bone,².—Painful pressure on the lower margin of the left malar bone,².—Drawing from the malar bone to the lower jaw,².—Sharp stitches in the left malar

bone,².—Frightful intermittent sharp stitches beneath the right zygoma,².—Crawling on the left cheek,².

Mouth.—Tearing pain in the teeth,².—[40.] Tearing in the teeth of the right side,².—Cutting pains in the tongue,².—Cutting in the muscle under the tongue,².

Stomach.—Nausea and inclination to vomit (Viborg, from Wibmer),².—Vomiting and diarrhœa (De Candolle, from Wibmer),².—Sharp stitches in the pit of the stomach,².—Violent stitches near the pit of the stomach, now in the right, now in the left side,².

Abdomen.—Pressing pain in the umbilical region,².—Pressure in the umbilical region, during and after eating,².—Pressure above the navel, near the pit of the stomach,².—[50.] Stitches beneath the navel,².—Cutting pains in the abdomen,².—Violent cutting and constriction in the lower abdomen, as if the abdomen would be cut off under the ribs, in the morning in bed,².—Acute pain in the whole lower abdomen beneath the diaphragm, at one time seeming like a pressure of the diaphragm up towards the thorax; at one time as a constriction of the whole lower abdomen, at another as a sticking as with many needles, or like sharp stitches in the intestines, again finally a drawing about in the intestines as from flatus,².—Stitches in the middle of the right side of the lower abdomen,².—Stitches as from several needles in the left half of the lower abdomen, on inspiration,².

Sexual Organs.—Cutting in the penis, seeming to extend to the bladder, not hindering micturition,².—Cutting pains in the penis,².

Respiratory Organs.—Sighing,².

Chest.—Fulness and tightness of the chest, obliging deep breathing,².—[60.] Sore and bruised sensation in the chest,².—Violent pain in the chest, aggravated by inspiration, relieved by expiration,².—Tension in the sternum,².—Burrowing pain beneath the sternum, without actual embarrassment of respiration,².—Stitches near the ensiform cartilage,².—A sensation of compression in the whole circumference of the left side of the thorax, with special pain in the region of the left nipple, and posteriorly beneath the left scapula,².—Benumbing compressing pressure beneath the left nipple,².—Slight painful drawing in the region of the left nipple, in the evening before going to bed,².—Burrowing about in the left side of the thorax, at one time beneath the scapula, and posteriorly near the spine, at another beneath the arm, at another beneath the nipple, manifesting itself by thrusts, stitches, and pressure,².—Pain in the left side on a line with the ensiform cartilage,².—[70.] Electric-like shocks towards the left side of the thorax,².—Sharp stitches beneath the last left ribs, after eating,².—Sharp stitches in the right side above the nipple,².—Sharp stitches in the right side, somewhat below or on the last true ribs, and difficult respiration with every stitch,².—Some shattering sharp benumbing stitches in the region of the left nipple,².

Heart.—Anxiety at the heart like an internal pressure, affecting even the spirits,².

Back.—Crawling-like formication up and down the left half of the back,².—Needlelike stitches near the left side of the spine, about the middle of the body,².—A stitch like an electric shock in the small of the back, and extending upward in a zigzag along the spine to the scapular region, frequently repeated,².—Violent stitches in the first lumbar vertebra,².—[80.] Crawling, biting, itching, or paralytic pain in the left side of the posterior circumference of the pelvis,².

Superior Extremities.—Frightful tearing in the left shoulder, at the point where the arm joins the scapula.²—Tearing pain in the shoulders.²—Pain in the left humerus and shoulder-joint, gradually increasing.²—Paralytic pain here and there in the fingers.²—Pressing pain in the fingers.²—Drawing pain in the finger joints.²—Painful drawing at the articulation of the left index-finger with the metacarpus.²—Violent sticking at one time in both hips at the same time, at another alternating between them.²—Drawing pain in the thighs.²—[90.] Intermittent drawing in the upper part of the left thigh, beneath the joint.²

Inferior Extremities.—Paralytic pain in the knees caused by walking, aggravated by standing.²—Constant pain in the forepart of the knee.²—Paralytic drawing on the inner side of the right leg, only while standing.²—Pressing pain in the feet.²—Painful sensation (pressure and sticking) beneath the outer malleolus of the left foot, more anteriorly, along the outer side of the foot, during rest and motion, with soreness and pain in bed.²—Pressing pain in the toes.²

Generalities.—Sticking drawing in all parts of the body, especially in the back.²—Sticking pains in various parts of the body.²—Symptoms oblige lying down, and then disappear, but reappear in other parts.²—[100.] After a meal the symptoms of the head, chest, and abdomen are always aggravated.²—Most of the troubles appear on the left side.²

Skin.—Small pustules (reddish spots) on the chest and back, without moisture, lasting several days.²—Biting, itching, crawling in various parts of the body, obliging scratching and rubbing, followed by burning.²

Fever.—Violent shivering chill over the whole body.²

EUPATORIUM PERFOLIATUM.

Authority. 6, Dr. Jeanes, Hahn. Month., vol. iii, 1867, p. 151, a gentleman drank a few spoonfuls as a tea.

[100.] An attack early in the morning, as of *whirling around in the brain*, or, as he described it, “as if he had been placed in a coal screen, and whirled around two or three times, repeated after a short cessation.”⁶

EUPHORBIA IPECACUANHÆ.

Authority. Bigelow's Sequel, 1822, p. 177, experiment.

In doses of from ten to twenty grains it is both an emetic and cathartic, that is more active than ipecacuanha in proportion to the number of grains administered; in small doses it operates with as much ease as most emetics in a majority of instances. If it fails, however, at first, it is not so safely repeated as many of the emetics in common use. If accumulated in the stomach to the amount of two or three scruples, it finally excites active and long-continued vomiting, attended with a sense of heat, vertigo, indistinct vision, and great prostration of strength. Its operation seems exactly proportionate to the quantity taken, and the vomiting is not checked by the powder being thrown off in the first efforts of the stomach.

EUPHORBIA LATHYRIS.

Authority. 3, Journ. de Med. de Toulouse and Repert. de Pharm., Paris (Pharm. Journ., 2d ser., vol. ii, 1861, p. 435), one man took eighteen seeds, another twenty, and a third took twenty-five.

A short time after the ingestion of the seeds they produced violent purgation, vomiting, frequent diarrhœa, and a general pallidness and coldness spread over the body.³

EUPHORBIA PEPLUS.

Authorities. 1, Dr. Bernard, Journ. de Med. de Toulouse and Report de Pharm., Paris (Pharm. Journ., 2d Ser., vol. ii, 1861, p. 436). a lady applied the juice of the stems to her already swollen gum; 2, J. Murray Moore, M.D., Hem. World, vol. xii, p. 496, a boy applied a poultice of the leaves to a "black eye."

Instantly her mouth became so much inflamed that the doctor, when he saw his patient, thought that the inflammation was due to the action of mercurial medicines. For several days the pain was intolerable, and wrung cries from the patient, who, deprived of sleep and unable to drink, was a prey to indescribable agitation.¹—After a week his condition was as follows: Phlegmonous erysipelas had appeared under the left eye, spreading downwards and forwards over half the cheek. Five or six pustules also had risen on the face, one on the forehead, one on each ala nasi, one on the root of the nose, and others elsewhere, one also on the left elbow. They were characterized by a burning pain. The lower half of the nose was red, swelled, and inflamed, with a shiny surface. The lips were parched, swollen slightly, and the lower one covered with a crop of small pustules, another larger pustule appearing on the upper lip, half way between mouth and nostril. Prescribed Arnica 1, pil. i, 4 *tis horis*. This remedy did not seem to change the symptoms for a week later. We found additional pustules on the left side of the neck, and *these*, as well as two or three of those near the nose, had developed into *hard* boils, from which, doubtless, we could have extracted a pultaceous or cheesy matter. As he did not molest them, they slowly subsided.²

EUPHORBIVM.

Authority. 22, Mr. Furnival, Journ. of Sci., vol. iii, p. 81 (Lancet, 1836-7 (2), p. 739), Mr. F. swallowed a teaspoonful; death.

On swallowing the poison a sensation of burning heat in the throat and fauces, afterwards communicated to the stomach; incessant vomiting of watery fluid took place almost immediately; the tongue was covered with thick mucus; the pulse very irregular, and at least 150; the patient was in a cold perspiration and unable to speak intelligibly.²²

FAGUS.

Authorities. (From Berridge's Collection in Amer. Hom. Obs., 1876, p. 14); 10, Dr. Seley, from Dissert. on Hydrophobia, Eolong, 1762 (Med. Museum), a boy, æt. thirteen years, had eaten a large quantity of beech-nuts; 11, Haller quotes from Trans. (Act., Haffer), general effects; 12, Berridge (?), general effects; 13, Furstenan, Act. Phys. Med. Nat. Cur., vol. viii, a boy, æt. twelve years, ate a great deal of beech mast; 14, same, effects on the inhabitants of a village of immoderate use of beech-nuts.

Swelling of mouth and headache.¹² On the fourth day after, I found

him in great pain, languid, and terrified with apprehension of present death. Pulse very unequal, sometimes extremely quick, sometimes languid and intermittent; skin burning violently; mouth flowing with froth and saliva; intolerable thirst, entreating for drink, but as soon as any liquid was brought he seemed to shudder with equal horror, as if he had been eating unripe grapes. Soon after eating the nuts he had been seized with torpor, gloominess, and dread of liquids. He had not been bitten by any rabid animal. Next (fifth) day, early in the morning, he was the same, but seemed to talk more in his wildness and perturbation of mind, and his mouth flowed with foam more abundantly; the urine he had voided by night was red and fiery, depositing a copious turbid white sediment, resembling an emulsion of beechnuts, subsiding as deep as the breadth of the finger at the bottom of the vessel. A few hours before he died he vomited a porraceous bile, after which he died quietly,¹⁰.—Seized with pleurisy, soon became delirious, and died in convulsions on the eleventh day,¹³.—Fatal pleurisy,¹⁴.—Ardent fevers, called *liepera* or *causas*, have been occasioned by eating them,¹¹.

FERRUM MAGNETICUM.

Authority. Jahr's Manual of Hom. Medicine, translated by C. Hering, M.D., Philad., 1836, p. 190.

Mind.—Walking along with a self-sufficient impression of importance.—Hopeful with hilarity and confidence in the future.—Fretful.—Irresolute; he considers for a long time before commencing anything.—Sluggish, not so speedy as commonly, more tranquil.

Head.—Headache when stooping, exerting the arms, and ascending steps.—Headache on a small spot, particularly in the forenoon, and more on the right side.—Headache suddenly moves to the eyes and nose, as if tears and sneezing would follow.—Intermittent, throbbing headache.—[10.] The hair falling off.—Itching, small painful eruptions, small crusts on the head.

Eye.—The lower lid swollen, and the eye smaller from it.—Soreness in the lachrymal caruncles, succeeded by water running from the eyes.—Stinging itching in the canthus.—Pain as from a pressure on the eyelid, which prevents seeing.—Cloudiness before the right eye, which causes twinkling.—A small oval circle, with rainbow colors, around the candle.

Ear.—Throbbing in the earflap.—Stinging in the external ear.—[20.] Tingling in the ears.—Drawing in the ear and larynx when swallowing.—Pinching and shooting deep in the ears.—Itching, cramping, and cool shooting in the auditory passage.

Nose.—Sneezing, with obstruction of the right nostril, catarrh.—After a thrust in the nose with the finger, at once (about 12 drops) blood falls out.—Sudden prickling in the right nostril, which produces shaking and sneezing,

Face.—*Sunken countenance*, with general warmth, and succeeded by redness of the face.

Mouth.—Tenderness of the teeth when masticating.—The teeth easily set on edge.—[30.] The gums bleed easily when pressed upon.—An itching sensation behind on the palate.—Collection of water and saliva in the mouth.

Throat.—Stinging in the right side of the throat.—Bitter rancid taste

in the pharynx when hawking.—A sensation as if phlegm adhered to the uvula.—Pressure in the œsophagus, as if he had swallowed too much at once.

Stomach.—Ineffectual eructation.—Nausea.—After meals taciturnity, self-reflection, weariness; heat, discharge of wind, pain in the region of the stomach and anxiety, pains in the epigastrium, particularly when inspiring, urging to stool, and diarrhœa.

Abdomen.—[40.] Rumbling, rolling, grumbling, croaking, and whistling in the abdomen, with escape of wind, and urging to evacuate and urinate; the rumbling in the abdomen connected with a drawing through the legs down to the toes.—*Much offensive wind* (with the stench of rotten eggs) *escaping soon after meals.*—The wind seemed to come all from one and the same spot, in the left side of the abdomen.—During meals flatulency, movement, and croaking in the abdomen.—Uneasiness in the abdomen.—The pains extended from the abdomen to the breast, particularly in the left side.—All disorders of the abdomen are felt particularly in the left side.

Rectum and Anus.—Creeping and itching in the rectum.—Stitches in the anus.—Itching over and in the anus.—[50.] *Strong urging to stool, but voiding only wind.*—Immediately after dinner, *urging to stool, with chilliness*, preceded by discharge of wind, then stinking diarrhœic evacuation, weariness, and pale sunken countenance.—Sudden or strong urging to evacuate, with contraction of the scrotum, and eructation.

Stool.—Purging stools, accompanied with discharge of wind, and succeeded by rumbling and rolling in the abdomen, as when water is poured out from a bottle.—The feces discharged in short, abrupt, soft, and lubricated pieces of a round shape, afterwards diarrhœa.—With a discharged wind some watery purging stool escapes.

Urinary Organs.—Much red urine, which becomes clay-colored, when remaining for awhile.

Sexual Organs.—Strong sexual passion, with and without erections.—Defective irritation and inclination to cohabit, without, however, being impotent.

Respiratory Organs.—Dry cough from irritation in the trachea, as from dust in the larynx, after dinner, when washing himself.—[60.] Easily hawking out phlegm from the choane and the trachea.

Chest.—Free in the chest.—Tearing stinging in the left side of the breast, from the foreside to the backside, and from the upper to the lower part, only when expiring.

Heart and Pulse.—When strongly distending the thorax and retracting the right arm, the heart beats strongly and in short strokes.—Pulse slow and soft.

Neck and Back.—In the morning pain in the neck, as from lying improperly.—Rheumatic and minutely pricking pains in the shoulderblade, stinging when inspiring.

Extremities.—Tremors of the arms and legs.

Superior Extremities.—Drawing disabling pains in the right upper arm.—Wrenching pain in the elbow.—[70.] Spasmodic drawing and acute pressure in the forearm.—Pressure between the hollow bones of the forearm.—The wrist aches, as if wrenched, when bent.—Dryness and tightness in the hands.—Intermittent drawing, frequently as if in the bones, in the right hand, in the wrist, the thumb, through the metacarpus into the forefinger.—Minute pricking, particularly in the joints and the points of

the fingers.—Intermittent spasmodic pain on the ulnar side, and in the ball of the thumb of the right hand.—Throbbing in the point of the thumb.—Pain in a paronitium on the little finger.

Inferior Extremities.—Straining pressure in the right hip-joint, when drawing up the thigh, at night, and in the morning; the pains disappear when lying on that side, but reappear when lying on the left.—[80.] Minute, sharp, itching stinging in the left thigh.—Painful stiffness on the inner side of the right knee, particularly when bending, after stretching out the leg, and only when walking on the street.—After rising, weariness in the knees.—Sharp stinging in the knee.—In the morning, spasm and tightness in the calf of the leg.—A drawing pinching from one ankle to the other.—Wrenching pain in the foot-joint.—Ganglion on the back of the foot.—When stepping out in walking, a sensation in the back of the foot, as if the boot were too tight.—In the evening, in bed, the foot on a small spot over an extensor very painful, when touched and bent upwards. [90.] Creeping and stinging in the heels, tickling in the sole.—Stinging in the big toe, which produces twitching.—The little toe aching, as if hard pressed.

Generalities.—Infirmary, difficult movement, relaxed muscles.—After perspiration, during a moderate walk in the P.M., *weakness* and lassitude, *as if arising from the abdomen*, tremor of the knees and hands, fatigue from walking up and down the room.—Disabling heaviness.—*Disorders from travelling on foot*, viz., thirst, perspiration, weariness, pale countenance.—Some of the pains and the itching reappear after four weeks.

Skin.—The skin of the hands on different places peeling off.—Many small warts on the back of the left hand and the wrist.—[100.] Bluish-red spots in the region of the metacarpal bone of the forefinger, not disappearing from pressure.—Spots, resembling summer freckles, on the back of the hand and fingers.—*Red spots* on the lower ribs, above and below the bend of the elbow, on the wrist, the ball of the thumb, of the size of a lentil, which momentarily disappear when pressed upon.—Red burning spots on the inside of the thigh, where the scrotum lies.—Efflorescence on the forehead, in the eyebrows, on the root of the nose, the cheeks, lips, and chin.—Stinging, shooting, pricking, and itching on different parts.—When stretching the upper arm forwards, sudden heat flies over the hand.—Burning near a golden ring on the forefinger. Itching and pricking on different places, also about the nipples, on the abdomen, etc., *abated from scratching, but reappearing on other spots*.—Itching on different spots, every evening.—[110.] Itching and pricking in the face, and on the lips.—Itching and stinging on the mons veneris, scrotum, and the point of the glans.—Fretting itching between the tendo Achillis and the external ankle, succeeded by a red painful streak.

Sleep.—Gaping, with strong expiration, and collection of water in the mouth.—Sleepiness, *he falls asleep when lying and sitting*.—Inclination to stay in bed in the morning.—Unrefreshed from sleep, pressure in the eyes, muddled head, flabby skin of the face, weary arms.—On awaking, the right arm over the head.—Dreaming immediately after going to bed, sudden awaking and chilly shivering, after which a very sound sleep.—Absurd dreams at night, he awakes with perspiration and heat at 3 A.M.

Chilliness.—[120.] Chilliness in damp weather.—Chilly shivering along the left side, upon which he does not lie.—Chilliness on the left side of the breast.—Internal heat, with perspiration and slow pulse, after washing the body.—Warmth, as if catarrh were developing itself, with weariness.

ness, sunken countenance.—After walking, warmth, with weakness originating from the stomach; tremor, dizziness, pale countenance, inclination to lie down.—Heat in the face.—Perspiration with the least exercise.—Morning perspiration, particularly on the body and occiput.—Sourish-smelling perspiration, as in measles.

FERRUM PHOSPHORICUM.

Authority. J. C. Morgan, M.D., Amer. Journ. of Hom. Mat. Med., New Ser., vol. v, 1876, p. 308, proving with 2x, took 1 grain at 11 P.M. (first day); $\frac{1}{2}$ grain at 10 A.M., 4 and 10 P.M., after meals (second day), dose (third day); several doses after meals and at midnight (fourth day), dose at 11 o'clock; doses still taken regularly after meals (sixth day); doses at 4 P.M., and after meals (eighth day); no more medicine till noon, and again at 3.45 and 8.30 P.M., after meals (tenth day); doses at 4 and 9.30 P.M. (eleventh day); a dose at 10.30 P.M. (twelfth day); dose at 8.30, before breakfast, and at 12.20 P.M. (fourteenth day); dose at 1 P.M. (fifteenth day); a dose at 1 and 10 A.M. (sixteenth day); pellets of 30 cent. at 1 A.M.; another dose at 8.30 A.M., 2 P.M., and 10 P.M. (seventeenth day); pellets of 30th at 10.30 A.M., pellets of 6th dec. (shortly after eating an orange) at 11.45 P.M. (eighteenth day); another dose of 6x at 11.30 A.M. (nineteenth day).

Mind.—Early in the evening loss of courage and hope; better since sleeping (second day).—Feeling constantly as though a stimulant were needed (none taken since the sixth day, relieves when taken); a feeling of "letting down," inertia, indifference to ordinary matters, with inward craving for brandy, and feeling as if energy would be renewed by it, yet no real muscular debility, more a feeling of indolence as to ordinary matters only (eighth day).—Evening, impetuous feeling, yet obstacles cause annoyance and hesitation, and trifles seem like mountains, still intolerant of hindrance and annoyance (ninth day).—All the morning under pressure of influences of contradictory sort, no lack of firmness (tenth day).—Afternoon, recurrence of the intolerant feeling (fourteenth day); hasty, intolerant feeling in the afternoon (fifteenth day).—Indignation for causes followed by oppression of left chest and stomach (fifteenth day).—Walking in a quiet part of the city after dark had a soothing, pleasant effect, ceasing on returning to the bustle of the central streets. At one time this afternoon cross words of another party about an absent stranger created a feeling of momentary shrinking and timidity (fifteenth day).—Marked increase in resoluteness and precision of mind; less of "exhausted" feeling from dealing with opposition and hindrance than for awhile past; less "intolerance" at the same time (seventeenth day).—In street-car conversation of fellow-passengers, especially when earnest or excited, was unendurably annoying, was glad to change my seat. This intolerance passed off during the afternoon, and the buoyancy and energy returned by evening (nineteenth day).

Head.—[10.] Head feels as if sleep had been insufficient, with desire for sleep; 4.30 P.M., fell asleep at my table (not having lost sleep last night) (eighth day).—While reading, headache from right brow to right ear (second day).—Top of head, aching dullness, extending towards orbits and sides of head as a pressure; worse when holding the head down in writing; not noticed when going about; but whilst walking in the street,

more in occiput; when rising and walking, etc., most in top of head, just as the force of the circulation most impinges; always dull and oppressive, without throbbing altogether, it seems in the subcutaneous cavities of the head (tenth day).—(Old symptoms get worse, as of fatigue of brain from long study), (tenth day).—In the afternoon, twinges of pain from right vertex to right supraorbital foramen (sixteenth day).—Dull right-sided headache (third day).—At 11 P.M., sharp twinge over the whole left side of the head (thirteenth day).—All day a dull headache, slightly, mainly right side; most on first thinking of it (fourteenth day).—(Less tired aching in the occipito-cervical region than usual, in the morning), (second day).—During this afternoon every concussion (as of coughing, and even sudden and hard smacking of the lips) is felt as a dull painful sensation in the posterior part of base of skull (the cervico-occipital region), (seventeenth day).

Eye.—[20.] Late in the evening, when riding, neuralgic ache at inner left eyebrow, and down left side of nose (ninth day).—7.30 P.M., sharp ache at outer edge of left orbit, as if in the bone. At 8.30, similar, but slight pain on right side, both transient (thirteenth day).—Painful smarting in edges of right eyelids (second day).

Ear.—In a few minutes aching sticking in right ear.—Sticking in right ear (second day).—Went to bed with sticking in right ear, as if a large pointed stick were lodged deeply therein, extending as a dull headache over that side; seemed to be subaponeurotic in location (as if above periosteum), (fourth day); dull feeling on right side of head still observable (fourth day).

Nose.—Painful smarting in anterior right nasal passage (second day).—After the last dose, painful smarting of right posterior nasal passage, especially during inspiration, better by expiration (had been asleep), (second day).

Face.—After moderate tepid bathing, mostly with sponge, lips look blue (seventh day).—Grumbling in lower jaw, near (filled) molar, left side (seventeenth day).

Mouth.—[30.] Light coat on tongue not unusual, but increased, with a yellowish tint increasing towards the base (eighteenth day).

Throat.—Constant working down of phlegm behind velum palati; also loosing from below (fifth day).—Speedily, a general liberation of pharyngeal and tracheal and nasal mucus (after first dose, fourteenth day).

Stomach.—Appetite and Thirst. On sitting down to supper at 7.30 P.M., indifferent to food, but ate fairly, food tasting good (tenth day).—1 P.M. had a desire for, and drank ale; at 3 P.M. no appetite for dinner, but desire for brandy, of which took about a teaspoonful; afterwards ate with good relish (the same yesterday; the same desire before breakfast) (sixth day).—Very little or no desire for stimulants since yesterday, the last taken (thirteenth day).—Studying till 2 A.M., rose in the morning somewhat below par, desire for brandy, took a teaspoonful with good effect (sixteenth day).—At 1 P.M., not having eaten since breakfast, somewhat exhausted, with desire for brandy (not taken), (seventeenth day).—Thirst for cold water and for brandy, in the morning (eighteenth day).—**Eructation and Hiccough.** Irritating rising, not sour, but somewhat greasy in flavor (half an hour after second dose, fourteenth day).—[40.] Noon, hiccough after sitting bent towards the floor (eleventh day).—Hiccough once when respiration compressed the stomach, repeated some time after (seventeenth day).—At 9.30 P.M., sitting at table bent forward

reading, most intense heartburn, with rising so irritating it made me cough and hem for some time; irritation in throat and behind left of mid-sternum. The later risings of fluids have a slightly greasy flavor, still provoking repeated cough; they come up with eructations of gas (partook at supper of stewed oysters and very aromatic good tea), (thirteenth day).—*Nausea*. Rose this morning with a nauseated feeling (eighteenth day).—*Stomach*. Pinching in epigastrium (after a few minutes).

Abdomen.—Leaning, standing over the table, repeated emission of fetid flatus, continuing while undressing (first day).—At breakfast, bending forward, colicky in transverse colon; repeated while standing, using the arms moderately towards the left. In a few minutes after a dose again colicky in transverse colon (third day).—2 P.M., colicky feeling in transverse colon (eighteenth day).—Threatening, of diarrhoea from colon to rectum (twentieth day).

Stool.—Soft, but consistent, decidedly yellow, easy stool (fifth day).

Urinary Organs.—[50.] The urine which, before taking the drug, was yellow, became limpid, abundant, and pale after taking, the weather being warmer; the past two days the weather being cooler, the urine is darker, less copious; when pale, a few drops crystallized on glass examined by the microscope presented several crystalline forms, the principal being hexagonal plates answering to cystin, as figured in Frey's microscopical technology; also tablets answering to uric acid and chloride of sodium, but not numerous (seventh day).—Urine pale, the quantity being somewhat copious, the weather cool (fifteenth day).

Chest.—Pain in chest, in the morning (third day).

Heart and Pulse.—Sitting writing, palpitation (third day).—Palpitation while sitting (soon after second dose, eleventh day).—Accelerated pulse (eleventh day).

Neck and Back.—Pain in neck, in the morning (third day).—Aggravation of a habitual aching in the dorsal spine all day, especially when standing or sitting, better by going about, and by leaning back against the chair, supporting the spine; these symptoms are habitual, but are more conspicuous and constant and annoying; also better by change of position, even by brief bending forward (when standing), (fifteenth day).—Sitting in church, in the evening, right lumbar region felt tired; needed support (seventh day).—Dull pain (when walking bent forward) in left lower lumbar region (seventeenth day).—[60.] Walking in the street at 1 P.M., after standing, aching at sacro-iliac symphysis; better by pressure (eighteenth day).

Superior Extremities.—After writing, rheumatic feeling in right wrist, extending downwards in the course of the dorsal tendons, most when resting it; then the pain seems to ebb and flow at short intervals. When writing, it occasionally extends up the forearm, mostly on dorsal and ulnar aspects; on rising, felt in little finger to first phalanx; better by external warmth and wrapping (after twenty minutes, sixteenth day).

Generalities.—(Old symptoms get worse, as frequent change of position in bed on waking in the morning, and much of the time since, because of aching in neck, throat, and occiput), (tenth day).—(Less tired feeling than usual, in the morning), (second day).—Malaise all the evening (eighth day).—All the evening sensitive to cool air (eighth day).—Noon, very sensitive to cool air, 65° F.; desire to be in a warm room (tenth day).—Cool air disagreeable, but tolerable (seventeenth day).

Sleep.—4.30 P.M., drowsy; eyes feel it much; the feeling extends up-

ward into the head; soon after had to lie down and take a nap (eleventh day).—Waked wearily (third morning).

Fever.—[70.] Heat and dryness of face and palms while sitting (soon after second dose, eleventh day).—About 6 P.M. observed that face and hands were again heated and dry whilst reading; also the throat and upper chest (twelfth day).—Dry heat of palms (eleventh day).

FERRUM SULFURICUM.

Authority. 2, M. P. Limousin, Lamothe, *Annal. d'Hyg.*, Jan. 1851 (*Pharm. Journ.*, vol. xi, 1851–52, p. 84), a man named Matet was poisoned by an unknown quantity.

Groaning,².—Vomiting,².—Complained of a pain in his side,².

FERRUM TARTARICUM.

Authority. E. W. Berridge, M.D., *U. S. Med. Invest.*, New Ser., vol. iv, 1876, p. 574, Mr. — took 15 grains in one dose.

Uninterrupted sensation, as if an immense load were on entire upper portion of head, causing a gloomy apprehensiveness of congestive apoplexy. It lasted two or three days, and was removed by a dose of *Nux* 1 (after two days).—Heat from, or heat at cardiac orifice of stomach, lasting twelve hours; not affected by food or drink (after two hours).

FILIX MAS.

Authority. 4, Dr. E. P. Scales, *Pub. Mass. Hom. Med. Soc.*, vol. iv, p. 601.

A woman about thirty-five years of age complained of bloated abdomen, with more or less pain; she insisted upon it that she had a tapeworm. I gave the tincture of *Filix mas*, 15 to 20 drops at a time, at first two or three times a day, on an empty stomach, and then early every morning.—The bloating of the abdomen diminished, but there was developed, as I think, in consequence of the *Filix mas*, a severe prolapsus of the vagina, and pain and tenesmus of the bladder, with copious and frequent emission of urine, with intense pain, which continued until after I abandoned the use of the *Filix* and gave *Chimaphila*, and those painful symptoms of vagina and bladder did not return, except in consequence of great fatigue, as long walks, much standing, etc.,⁴.

FÆNICULUM.

Fœniculum vulgare, Gærtn.

Natural order, Umbelliferæ.

Common name, Fennel.

Authority. 2, C. G. Mitscherlich, *Pharm. Journ.*, vol. ix, 1849, p. 233, effects of large doses of the volatile oil.

Diarrhœa,².—Increased secretion of urine,².—Excites the vascular system and the respiratory organs,².

FRAGARIA.

Authorities. **7**, W. Fergus, *Lancet*, 1869 (2), p. 563, effects on a patient of eating strawberries; **8**, M. Garnier, *Lyons Médical (Med. Times and Gaz., 1875 (2))*, p. 109, a girl, æt. fifteen years, ate a cup of strawberries, death; **9**, Dr. Cutsem, *Rev. Hom. Belge*, '877, effects of an infusion of the root on two women who had nursed their children for fourteen months, and wished to wean them, but could not on account of the large quantity of milk.

Comatose.⁸.—Livid countenance.⁸.—After these women had drunk a decoction of the roots for a few days the breasts diminished in size, and the secretion of milk ceased.⁹.—Small, intermittent pulse.⁸.—Failure of the heart's action and prolonged, leaving the patient weak and languid.⁷.—Complete prostration.⁸.—Profuse viscous sweat.⁸.

FUCHSIN.

Dr. Charvet, *Annals d'Hyg. Pub.*, 1863, vol. xxii, p. 281, effects on workers. This long and detailed account, filling some thirty pages in the original, cannot be accepted as pure effects of anilin-red, since the admixture of Arsenic in appreciable quantities throws great doubt upon the origin of many symptoms.—T. F. A.

GELSEMIUM.

Authorities. **35**, W. F. Hani, *Chicago Med. Journ.*, vol. xxv, 1868, p. 760, fatal poisoning of a child, æt. eighteen months, by an unknown quantity of the fluid extract; **36**, A. E. Hardin, *Rich. and Louis. Med. Journ.*, June, 1873, p. 621, Dr. J. took about a tablespoonful of the tincture; **37**, Dr. Freeman, *Lancet*, 1873 (2), p. 475, a boy, æt. three years, took about 50 minims of the tincture (1 in 5), and died; **38**, same, a girl, æt. nine years, took a dessertspoonful of the tincture, and died in two hours; **39**, omitted; **40**, R. N. Taylor, M.D., *Rich. and Louis. Med. Journ.*, 1875 (1), p. 609, a negro, æt. nineteen years, took 15 drops of fluid extract at one dose upon an empty stomach; **41**, same, the writer took 5 drops of the fluid extract, and in two hours 10 drops more; **41a**, second experiment; **42**, same, a boy, æt. nineteen years, took 12 drops of the fluid extract; **43**, Ringer and Murrell, *Lancet*, 1876 (1), p. 661, and (2), p. 569, seventeen observations on six persons; **44**, Geo. S. Courtright, M.D., *Cincin. Lancet and Obs.*, vol. xix, 1876, p. 961, Dr. Bennett, suffering from urticaria, took by mistake 1 to 2 teaspoonfuls of the tincture, and a little whiskey, cured by Morphine used hypodermically; **45**, Dr. Brewster, *Hahn. Month.*, vol. xi, 1876, Mrs. V. took before breakfast a teaspoonful of a strong decoction of the root; **46**, W. Sinkler, M.D., *Philad. Med. Times*, vol. viii, 1878, p. 150, Mrs. T., æt. forty-nine years, took for neuralgia four doses of 5 drops each of the fluid extract; **47**, Ringer and Murrell, *Lancet*, 1878 (1), p. 858, Dr. J. B. Hill relates the case of five men taking from half a pint to a pint of the tincture each; **48**, same, *ibid.*, p. 892, a woman, æt. from twenty-five to thirty years, took 15 drops of the tincture; **49**, J. G. Parsons, *ibid.*, p. 953, G. G. P. swallowed about one drachm.

Mind.—Intellect was not impaired at any time, but was slightly confused,⁴⁴.—Aroused with difficulty,³⁵.—Loss of consciousness,⁴⁹.

Head.—[610.] Giddiness (soon),⁴⁹.—Giddiness was another prominent and early symptom. Some felt it over the whole head, but by far the larger number said it was limited to the brows. Standing or walking made it much worse. When well marked the patients staggered, and were afraid even to stand, much less to walk. So giddy was one patient that he nearly fell off the form. Some described their heads as going round and round. They felt and seemed drunk, though without any incoherence, still less mental excitement,⁴³.—Pain in the head and eyes. Patients described this pain variously. It was generally limited to the forehead, and most marked just over the eyes. Some called it a dull sensation over the eyes; others a heavy pain; and others a giddy pain; and one patient experienced pain over the occiput, with a sensation as though the crown of the head were being lifted off in two pieces. This headache was sometimes absent, and sometimes followed instead of preceding the other symptoms. Dull aching pain in the eyeballs, now and then shooting in character, occasionally worse in one ball, sometimes followed and sometimes preceded the headache. The headache and pain in the eyeballs, intensified on moving the eyes, were often severe. When ptosis was well marked, the effort to open the eyes widely caused considerable pain, and the patient seemed to get relief by closing them,⁴³.—I found the doctor sitting on the edge of a lounge, being held by two persons, with the head falling forward, the chin resting on the breast; I at once had his head raised up, but it immediately dropped forward again on letting go of it, showing that the parts were paralyzed; at breakfast his chin had dropped down, and it was with difficulty he could keep his head from falling on the table; could not eat, and with difficulty, on account of his head falling forward, walked into the next room,⁴⁴.—Persistent and distressing numbness in the occipital region, which lasted for some hours after the consciousness returned,⁴⁹.

Eye.—Eyes closed,⁴⁷.—Eyes staring,⁴⁸.—Strabismus,⁴⁹.—Dropping of the eyelids, especially the left,⁴⁹.—Pupils large and dilated,³⁵.—[620.] Pupils largely dilated and insensible to light; eyes had a fixed stare; sclerotic congested; lids drooping, so that it was necessary to pull them apart to see the eye,⁴⁴.—A few drops of the solution of the alkaloid were put into one eye, and in each case the trial pupil became widely dilated, the dilatation usually beginning in about thirty minutes. Not only does the pupil dilate, but the muscle of accommodation becomes paralyzed and the sight affected. In twenty-four hours vision again becomes nearly natural, but the pupil remains dilated much longer, sometimes, indeed, for a week, or even a fortnight,⁴³.—Dimness of vision,^{38 40}.—Vision slightly indistinct,⁴².—Some difficulty in sight before he had walked two squares,⁴⁴.—In every case the sight was affected. At first the sight without being misty, is not as clear as usual; then slight mist comes before the eyes, one patient comparing it to "a lot of smoke rising before his eyes," and another to a "thick veil." The sight at last becomes so affected that it fails almost completely, failing first with distant objects, then, as the sight becomes more impaired, nearer and nearer objects become hazy,⁴³.—Double vision,^{37 38}.—The drug seems to produce two kinds of diplopia, one much more persistent than the other. As to the transient kind, we find it on many occasions a very passing phenomenon, lasting only a few seconds, then disappearing, then, after a few minutes, reappearing. In this form images in the median vertical line appeared double, distant objects at first undergoing the dupli-

cation. Sometimes the patient was conscious that the diplopia was coming on; thus one woman said: "I know that it is now coming on; I feel such a heavy weight under my upper eyelid." The double vision then came on, and, with the heaviness, ceased in a few seconds. One image was higher than the other; in this respect the images varied much. The following descriptive notes were taken down rapidly from the patient, the phenomena occurring as fast as they could be written: "One gas-jet appears about six inches above the other, and there is six inches between them horizontally; the upper one is to the left; now the right is uppermost; now the left slightly again; going over to the right now again; exactly over one another now, and quite close together; now again separated, left the highest; now over one another." With other patients the two images seemed on a level. Sometimes the drug produces only this transient kind of diplopia; at other times both kinds; and sometimes one kind preceded the other, the transient usually preceding the more constant form, and continuing to recur from time to time, while the constant form lasted. The phenomena of the constant form of diplopia follow a definite order, and take place in the upper half only of the field of vision. They occurred first with objects held at the extreme right or left of the visual field; and as the patient passed more under the influence of the drug, then with objects held nearer and nearer the middle line, and at last, usually for a short time only, objects in the median vertical plane seemed double. As the effects of the drug wore off, the double vision disappeared in the inverse order. The outer lateral image was the higher, and the further the object was carried to the right or left the greater was the horizontal and vertical distance between the images. When a colored glass was placed before either eye, the outer and higher image was seen by the covered eye. When the object was carried high above the head, the two images gradually coalesced, and the object looked very much thinner, "like a thread." With well-developed diplopia there is impaired movement of the eyeball, chiefly affecting, as far as we could ascertain, the external and internal rectus, especially the external, for the outward and inward movement of the eyeball was less free than before the action of the medicine. The ball appeared to be moved by greater effort, so that when carried as far as the weakened muscles are capable, the ball oscillates, as though the patient with great effort moved it as far as he could, and then the tired muscles gave way a little, but being roused to an effort they carried the eye back again; the frequent repetition of this effort gave rise to an oscillation. The external rectus is generally first affected, and not unfrequently one rectus sooner and in excess of the other. Even when the diplopia is strongly marked, the loss of power over the muscles is not very great, and there is no obvious squinting. Then, as the patient becomes still more affected, ptosis supervenes, and a great part of the whole of the upper half of the field of vision is cut off. The loss of power in the eye-muscles is then more marked, but without the occurrence of obvious squinting. At this time the symptoms no longer follow the order previously described, but assume various phases, often changing rapidly. Thus, whilst on one side the outer image is the higher, if the object is carried to the other side of the field the inner image becomes the higher; or, perhaps, for the first few seconds the outer and then the inner is the higher,⁴³.—Visionless (after one hour and a half),³⁶.

Face.—Face congested,⁴⁹.—[630.] Face and lips blue and livid,³⁵.—Lips of a livid color,⁴⁴.—Jaws rigid,⁴⁸.

Mouth.—The mouth was partially open, and the lower jaw hanging as an almost useless appendage; could move the tongue slightly, but unable to articulate distinctly,⁴⁴.—Paralysis of the muscles of the mouth and throat,⁴⁹.—Foaming at the mouth,⁴⁸.—Interior of mouth and fauces moist,⁴⁴.—Muffled speech,⁴⁹.—Speechless (after one hour and a half),³⁶.

Throat.—Difficulty of swallowing,⁴⁴.—[640.] Deglutition impossible,⁴⁹.

Stomach.—Considerable nausea (in three hours),⁴⁰.—Retching and vomiting,³⁵.

Urinary Organs.—Abundant flow of urine, this secretion having been scanty for a few days (in five hours),⁴¹.

Respiratory Organs.—Expectoration of a thick yellow pus for six or seven days,⁴¹.—Respirations slow,⁴⁴.—Respiration 20 (before experiment); 14 (in three hours and a half); 12 (in four hours and a half),⁴¹.—Slow, catching respiration,⁴⁸.—Difficulty of breathing, with oppression in the præcordial region; the difficulty of breathing rapidly increased, consisting of a series of short and rapid inspirations, followed by three or four prolonged gasps,⁴⁹.—Struggles for breath,⁴⁸.—[650.] Thought he was going to die from suffocation, until I had his head thrown back, when he said the air rushed into his lungs and relieved him for a time,⁴¹.—Respiration scarcely perceptible,⁴⁷.

Chest.—Pain in chest,⁴⁸.

Heart and Pulse.—Pulse 98 to 100, and very weak,⁴⁴.—Pulse 83 (before experiment); 78 (in three hours and a half); 53, rose to 65 on walking across the room (in four hours and a half); 53 (in five hours); 63 (in five hours and a half),⁴¹.—Pulse 87 (before experiment); 64 (in three hours); 84 (in four hours),⁴⁰.—After the lapse of one hour the pulse had fallen twenty beats per minute,⁴².—Pulse weak,⁴⁷.—Pulse slow,⁴⁸.—No pulse at the wrist or carotids,³⁵.—[660.] Pulseless at the wrists (after one hour and a half),³⁶.

Superior Extremities.—Could not pour coffee from a cup,⁴⁴.—Complete insensibility to pain in both arms,⁴⁴.

Inferior Extremities.—Staggering gait,³⁷.—Weakness in knees (in four hours and a half),^{41 42}.

Generalities.—Paralysis,^{47 48}.—Extremities cold, the pulse small and feeble, respirations sighing and jerking, pupils dilated, and the eyes suffused. There was paralysis of the bladder, the urine dribbling away constantly, and although there was general muscular enfeeblement, it was most marked on the right side, in the arm, and leg,⁴⁶.—In a few minutes she said she could not see; her head felt strangely. She took an emetic of mustard, which caused vomiting before the writer arrived. Found the patient in the following condition: Could not see; the blindness was complete. Neither could she talk or swallow; the glottis was spasmodically closed. She could moan, which she did almost continually; but the power of articulation was gone. Great trembling, with anxiety; was afraid she was going to die, and was very anxious to know if anything could be done. Face swollen and of dark color; eyes distended; pupils dilated; great prostration; pulse small and rapid; tongue and throat very dry,⁴³.—At 4.30 P.M., having swallowed two ounces of whiskey, with a view to its stimulating action upon my pulse, and having walked rapidly some distance, I had a full, strong pulse of 100 per minute, my normal pulse being 85 per minute. I injected under the skin of my left arm five minims fluid extract. I examined my pulse at 5 o'clock, and it had fallen to 84; vision

a little indistinct; at 5.30 pulse was down to 80 beats per minute; vision more disturbed. At 6 o'clock pulse 76, and temperature $98\frac{1}{2}^{\circ}$; disturbance of vision very great. It seemed almost impossible for me to fix my gaze upon any object, and when I succeeded in doing so, the object, whatever it happened to be, would fade away at first, and then reappear again. There was a sensation of fulness in my head, and a feeling of great weight and heaviness about the eyelids. When I opened my eyes to their fullest capacity, it seemed as though they were but half open. At 6.15 pulse was 72, no change in the other symptoms. At 6.30 pulse stood 69. At 7 o'clock I partook of a light supper. At 7.45 pulse was 60, and respiration 15; no change in temperature. The disturbance of vision completely passed off at 8 P.M., after which time no uncomfortable symptoms were experienced. At 8.15 pulse 60, respiration 15, and temperature $97\frac{2}{5}^{\circ}$. At 8.45 pulse 59, and temperature $97\frac{2}{5}^{\circ}$. At 9.15 pulse 60. At 9.45 pulse 60, and temperature $97\frac{2}{5}^{\circ}$. I then arose from the half reclining position which I had occupied during the experiment, and walked across the room rapidly for five minutes. On resuming my former position, my pulse during the first minute indicated 67, but in ten minutes it had fallen again to the old rate of 60 per minute. The temperature was not at all affected by the exercise, the thermometer recording $97\frac{2}{5}^{\circ}$ as before. At 10.30 pulse 58, and temperature $97\frac{1}{5}^{\circ}$; at this time I passed eight ounces of rather high-colored urine. I now ascended two flights of stairs and returned, but there was no increase in the pulse or temperature produced by the exercise. At 11 P.M., pulse 63, and temperature $97\frac{1}{5}^{\circ}$; the former very soft and compressible. At 11.30, pulse 60, and of the same character; temperature $96\frac{3}{5}^{\circ}$. Retired at 12.30, and slept soundly for five hours. Awaking at 7.30 A.M., I walked about several times, after which my pulse was 61, irregular and compressible; temperature 97.4° . During the forenoon I passed an unusually large quantity of urine, and my pulse did not regain its normal force and frequency until 10 o'clock in the morning.^{41a}—Vital capacity, average, 185 (before experiment); 217 (after first dose); 230 (after second dose); 237 (after third dose); 236 (after fourth dose); 230 (after fifth dose).⁴³—[670.] Vital capacity, average, 175 (before experiment); 175 (after first dose); 190 (after second dose); 185 (after third dose).⁴³—Vital capacity, average, 193 (before drug); 209 (after first dose); 207 (after second dose); 205 (after third dose).⁴³—Muscular strength, average, 75 (before experiment); 76 (after first dose); 67 (after second and third doses); 68 (after fourth dose); 64 (after fifth dose).⁴³—Muscular strength, average, 87 (before experiment); 65 (after first dose); 75 (after second and third doses).⁴³—Average muscular strength, 89 (before experiment); 87 (after first dose); 79 (after second dose); 80 (after third dose).⁴³—A sensation of general weakness and relaxation pervaded the entire system. Upon attempting to walk, the gait was at first slightly staggering, resembling that of intoxication (in three hours).⁴⁰—Loss of muscular power.³⁸—Complete muscular relaxation.³⁷—Any movement or touch of the head (which seemed greatly enlarged) most intensely aggravated all the distressing symptoms, as also did the application of any fluid to the lips, the dread of which was nearly equal to that evinced in hydrophobia.⁴⁹

Sleep.—Drowsiness (soon).⁴⁹

Fever.—[680.] Temperature $98\frac{1}{2}^{\circ}$ (before experiment); $95\frac{3}{5}^{\circ}$ (in three hours).⁴⁰—Extremities cold.⁴⁸—Profuse perspiration.⁴⁹

GEOFFROYA.

Geoffroya vermicifuga of Martin's.

Authority. (Berridge's Collection in New Eng. Med. Gaz., vol. xi, p. 306), Mr. Pechett, Arch. der Pharm., 1851, p. 226, quoted in Pharm. Journ., 1852, vol. xi, p. 83, effects of the seeds.

They cause violent vomiting, mucous diarrhœa, and death.

GERANIUM MACULATUM.

Authority. 2, Edward A. Murphy, M.D., Brit. Journ. of Hom., 1878, p. 79, I made an infusion of the plant, and took a teaspoonful.

In a few minutes I became giddy and saw double. When I would close my eyes and lie down I felt comfortable, but I could not open them without the recurrence of the above-mentioned symptoms. There was also ptosis and dilatation of the pupils, and my countenance assumed the appearance of one who had been indulging in strong drink a little too freely. I had great difficulty in walking with my eyes open, while I could walk easily with my eyes closed. I tried the decoction on several persons, and five times on myself, with the same result.²

GLONAIN.

Authorities. (135 and 136 from Berridge, Hom. World, vol. xiii, p. 401); 135, Dr. George Harley, Med. Times and Gaz., 1858, vol. xvi, p. 356, experiments; 136, Mr. F. A. James, *ibid.*, p. 383, experiment; 137, Allinson, Times, July 31st (Pharm. Journ., 1866-7, p. 263), a man drank a quantity; 138, Conrad Wesselhoef, M.D., North Amer. Journ. of Hom., New Ser., vol. vii, 1876, p. 6, experiments.

I touched my tongue with the cork moistened with the 1st cent. dil., but experiencing no effects beyond that which usually follows the application of Alcohol or Ether to the tongue, I put 2 drops into my mouth. At first I felt a kind of sweet and burning sensation, and soon afterwards a sense of fulness in head and slight tightness about throat, but without nausea or faintness. In a minute or two these effects went off, and could not help thinking that they were partially due to imagination. I now took 5 drops more, and as these did not cause any increased uneasiness, I took in the course of a few minutes 10 more drops. Being at the time quite alone, I became somewhat alarmed lest I should have taken an overdose, and very soon my pulse rose to above 100. The fulness in head and constriction in throat I thought were more marked than before. In a minute or two my courage returned, and the pulse soon fell to 90. The fulness in head lasted some time, and was followed by a slight headache. I took a drop of pure Glonoin by degrees, and found that on bringing it in contact with the tongue it at first gave rise to a sweet flavor, which was rapidly followed by a most disagreeable acrid burning sensation, lasting several minutes. Immediately after taking the drop the pulse was 105. I imagined, too, that I felt fulness in head and some tightness about throat; but as the effects gradually passed off in the course of a few minutes, I thought they were most probably due to fear and imagination. March 29th, at 12.45 P.M., my pulse being 80 and my breathing 22, I took a solution containing 1 part of

Glonoin to $6\frac{3}{4}$ of spirit, a quantity equal to $\frac{1}{6}$ drop of pure Glonoin. At 1 P.M., pulse was 90. I felt some fullness in head and slight tightness about throat. At 1.5 P.M. I took $\frac{1}{3}$ drop of pure Glonoin. In three minutes more pulse was 98. At 1.16 P.M. I took $\frac{1}{2}$ drop, and in four minutes afterwards, my attention having been directed to another subject, the pulse was 94. At 1.30 P.M. I took a drop of pure Glonoin, and in six minutes the pulse was 106. In ten minutes more, when I had become convinced that I ran no risk, the pulse fell to 78, the breathing being 18. The effect on the heart's action I consider to be entirely due to fear. The head and neck symptoms are too constant to be attributed to the same cause, though I have no doubt the imagination exaggerates them,¹³⁵—I took a minim of Glonoin, my pulse being 80. Half an hour before I had seen my brother take the same dose without any serious effect, and we now purposely changed the subject of conversation. In the course of a few minutes I exclaimed, "I feel drunk." This sensation was quickly followed by a dull aching pain at back of head, which was alternately better and worse, each accession becoming more and more severe. It soon extended to the forehead and the back of the neck, in which there was a decided feeling of stiffness. There was also some difficulty of swallowing, succeeded by nausea, retching, and flatulence. A profuse perspiration ensued, and in fifteen minutes the symptoms began to abate, but I continued dull and heavy. My pulse was now 100. Considerable headache remained, which increased in the afterpart of the day to such an extent that, at 6 P.M., I was compelled to go to bed. At daybreak I was not relieved, but after a few hours more sleep I arose in my usual health,¹³⁶—Was instantly seized with great pain, and his body became diffused with a dark-blue tinge. The unfortunate man only survived a few hours,¹³⁷.

The Glonoin used was the dilute nitroglycerin of commerce in proportion of 1 to 80.

TABLE I.

No.	Name.	Normal pulse.	Pulse after run.		Pulse in 5 min.	Difference.	Pulse in 10 min.	Pulse in 15 min.	
1	Mr. Chase.....	80	110	♂	100	10	100	104	+
2	Mr. Cavalgian.....	66	125	♂	106	19	92	88	.....
3	Mr. Morse.....	68	140	Glon.	100	40	100	88	.....
4	Mr. Faxon.....	76	142	"	88	56	88	96	+
5	Mr. Swan.....	73	176	"	120	56	104	116	+
6	Mr. Spears.....	80	116	"	102	14	110	100	.....

TABLE I.—Six provers first ascertained their normal pulse, then excited it by running at their utmost speed for about five minutes out of doors; immediately on returning to the room each prover's pulse was counted by another person, and, at the same time, just as the counting began, four provers each took a drop of Glonoin in a teaspoonful of water. In five minutes the pulse of each prover was again counted; the result, as exhibited by the table, shows the pulse of the two who took no Glonoin to have been reduced 10 and 14 beats respectively; while the pulse of the other four who took Glonoin after running was reduced 40, 56, 56, and 14 beats respectively. So far the result agrees with that obtained by Dr. Her-

ing. But the experiment shows also certain undulations of the pulse. This was counted again ten or fifteen minutes after running. No. 1, who took no Glonoin, shows the pulse to have risen to 104 beats, after having previously sunk to 100. No. 2, without Glonoin, shows a steady decline from 125 to 88. No. 3, with Glonoin, shows a steady decline from 140 to 88. No. 4, with Glonoin, shows a decline from 144 to 88 in five and ten minutes, and then a rise to 96 in fifteen minutes. No. 5 was still more remarkable in this respect, showing a rapid diminution of pulse, from 176 to 120 in five, and to 104 in ten minutes, and then a rise up to 116 in ten minutes. Prover No. 6 showed a gradual decline. We have then a falling and rising of pulse, after severe exercise, without Glonoin, *but the falling and rising is much more marked in two out of four provers who took Glonoin.*

The next table exhibits the effects of Glonoin on the pulse of eight provers, without preceding exercise.

TABLE II.

No.	Name.	Normal pulse.	Drops of Glon.	Pulse in 5 min.	Depressed or raised.	Pulse in 10 min.	Depressed or raised.
1	Miss H—d.....	88	1	86	—	84	—
2	Mrs. M—s.....	72	1	72	—	76	+
3	Miss De W—e.....	76	1	80	+	84	+
4	Mrs. W—c.....	80	1	88	+	96	+
5	Miss D—y.....	80	1	76	—	88	+
6	Mr. Me—d.....	60	1	58	—	60	—
7	Mr. K—y.....	60	2	52	—	80	+
8	Mr. O—d.....	88	2	80	—	84	+

TABLE II.—Eight provers, five women and three men, after ascertaining their normal pulse during rest, took 1 or 2 drops of Glonoin, and then counted the pulse every five minutes; the result was remarkable. The pulse of No. 1 sank from 88 to 86, and then to 84, as also observed by Dr. Hering. Nos. 2, 3, and 4 showed a rise after five minutes. No. 5 showed first a falling in five minutes, then a rise after ten minutes. No. 6 showed a rapid fall after two minutes, a rise in five, and a fall again in ten minutes. No. 7, having taken 2 drops, showed a decided fall in five minutes, and a rise in ten minutes. No. 8, like No. 1, after two drops, showed a decline both in five and ten minutes. Aside from the probable homœopathic effect, we see in Table I that in two out of four instances (Nos. 4 and 5) there is a depression preceding a rise in the pulse, under the effect of Glonoin given during excitement by running. And Table II shows four out of eight provers to have experienced a gradual increase of the pulse, and four others a very marked decline immediately after the medicine. *This shows clearly in both tables that the primary action of Glonoin may be depression as well as elevation of the pulse. And we would be justified in drawing the inference that all other symptoms are liable to exhibit such a fluctuation, illustrating how in one or in different individuals the same drug may produce opposite effects, which are not necessarily primary or secondary.*

TABLE III.

1	2	3	4	5	6	7	8
No.	Name.	Normal pulse.	Pulse after run.	Pulse 8 min. after run.	Glonoïn was taken immediately after running.	Pulse 8 min. after 2d run.	Difference between column 5 and 7.
1	Mr. K—y.....	64	126	100		92	— 8
2	Mr. C—n.....	68	120	106		104	+ 4
3	Mr. Me—d.....	52	156	96		96	— 6
4	Mr. C—e.....	89	168	162		112	+ 10
5	Mr. S—u.....	76	164	120		11½	— 8
[Column 8 shows, in three instances, the Homœopathic effect of Glonoïn.]							

TABLE III is introduced to show that the pulse, having subsided after exercise, and having been excited again soon afterwards by a second effort, will be reduced by Glonoïn. This was the case with three provers out of five. In Nos. 1, 3, and 6 the pulse was reduced lower in eight minutes after Glonoïn than it was without it. This most probably finds its explanation in Table II, showing that the primary effect may be both diminished and increased action of the pulse, according to the individuality of the prover. It will therefore not always act homœopathically. Supposing, for instance, the prover to be one whose pulse is primarily depressed by Glonoïn, it is then possible that the prover's pulse, when increased by running, would not be met by Glonoïn homœopathically, but antipathically; for it may be found higher eight minutes after Glonoïn was taken during arterial excitement, than it was eight minutes after such excitement without the Glonoïn. If homœopathic, it should have reduced the pulse more quickly than it would have subsided of its own accord. The instance is illustrated by Nos. 2 and 4 of Table III. It is to be hoped that the subject will be established by further experiments.

TABLE IV.

SERIES I.								SERIES II. Second run ; Glonoin taken immediately after.							
Number.	Name.	Normal pulse.	Pulse after run.	Pulse 1 min. after run.	Pulse 3 min. after run.	Pulse 4 min. after run.	Pulse 10 min. after run.	Pulse 1 min. after 2d run.	Pulse 3 min. after 2d run.	Pulse 4 min. after 2d run.	Pulse 5 min. after 2d run.	Pulse 6 min. after 2d run.	Pulse 8 min. after 2d run.	Pulse 10 min. after 2d run.	Undulations, + Gradual decline.
1	Mr. C—e.....	90	144	120	96	96	96	132	114	114	108	102	108	104	+
2	Mr. Mc—d.....	60	152	88	80	80	76	126	88	100	92	88	88	80	—
3	Mr. F—n.....	68	162	100	88	88	84	104	100	92	88	84	84	84	—
4	Mr. C—n.....	76	152	120	100	100	96	112	108	100	100	96	96	96	—
5	Mr. S—s.....	84	172	116	96	96	92	118	96	92	96	104	104	100	+
Average.....		75½	136	108½	92	92	88½	118½	101½	93½	96½	94½	96	92½	

TABLE IV shows very similar results, illustrated by a larger number of counts. The columns of Series I show a steady decline of the pulse after running without Glonoin; while the columns of Series II show a decidedly irregular falling and rising of the pulse, which first diminishes, then increases, and finally diminishes again. This was the case with provers 1, 2, and 5. No. 1 had after excitement and Glonoin a diminution of pulse, till in eight minutes it rose from 102 to 108, then fell off again in ten minutes. No. 2, after a decided fall of pulse to 88 in three minutes, had an increase to 100 in four minutes, then a gradual decline. And No. 5, after having his pulse diminished to 92 in four minutes, had an increase to 96 in five minutes, and 104 in six and eight minutes, before falling to 100.

It will be observed that prover No. 2, whose pulse was primarily depressed in Table II, showed considerable fluctuation in Table IV; he is the only prover who appears in both tables. So far we are able to conclude that the conditions of a prover may vary at different times, showing different results from the same experiment. Furthermore, that Glonoin may raise the pulse at once in some provers, and that it may primarily diminish it in others before elevating it, during the quiescent condition of provers (Table II), and that it will affect it in a similar manner when the pulse has been excited by exercise (Table IV).

Though in a fair number of cases Glonoin will diminish the pulse quicker after its excitement by exercise than it would diminish without Glonoin, we also learn by Table IV that such homœopathic diminution does not always occur, but that the pulse may sink even more slowly under Glonoin than without it, as also shown by provers 2 and 4 in Table III.

Another purely physiological effect is also apparent, when provers excite the pulse by running a second time in ten or fifteen minutes. It will then be slower to sink under Glonoin than if only one effort to excite the pulse had been made, as in Tables I and III.

The dose is also a matter of importance. In the above experiments drop doses of the tincture (1.80) were used, and it was observed several times that increase of dose caused differences of results; thus in Table II provers 7 and 8 had 2-drop doses, followed by rapid primary depression; these were men. Two women (Nos. 1 and 5), taking only 1 drop, experienced from it the same effect as the men did from 2 drops.

Experiments are yet wanting to determine if higher attenuations will diminish the pulse quicker and with more certainty after running than the drop doses of tincture used by the provers above named, and which failed in Table IV to produce a constant decline, but tended rather to elevate the pulse.

As for Glonoin as a substance, it is one of those whose active qualities are not latent or difficult to develop. Like its new relative, Nitrite of amyl, it acts more quickly upon the organism than most other substances. It is therefore well adapted to proving, and to illustrate to novices the effects of drugs upon the body,¹³⁸.

GOSSYPIUM.

Authority. 2, Van de Waker on Criminal Abortion, p. 54, a girl took a tablespoonful of the extract every two or three hours.

Headache,².—Frequent desire to urinate, with burning pain,².—Pain in back,².—Caused her to sleep a great share of her time,².

GRINDELIA.

Grindelia squarrosa.

Natural order, Compositæ.

Authority. J. H. Bundy, M.D., *Hom. Times*, vol iv, 1877, p. 125.

I prepared a tincture of the dried plant, using 8 ounces to a pint of Alcohol 78°, by percolation. At 7 p.m. I took a teaspoonful of the tincture; repeated the dose in half an hour, at which time I began to feel a terrible fulness in my head, as though I had taken 10 or more grains of Quinine. This continued for about ten or fifteen minutes, when I was taken with a pain in my left eye and right knee-joint, precisely like acute rheumatism. The pain in my knee did not last more than half an hour, and at this time I took the third spoonful. The pain in my eye became the most intense that can be imagined, the pupil becoming dilated largely; and strange to say, it was two hours before the right eye became affected, but when it did, my misery was only doubled. At the time the right eye became affected, I was taken with an unbearable pain in the entire region of the liver and spleen, and so severe was it that I could not lie still one moment, and the soreness in the region of the pain was like nothing to which I can compare it, except that of acute rheumatism. With a towel tied around my head, and hot applications over liver and spleen, declaring that I had inflammation of the brain and of the liver and spleen, did I pass the most terrible night of my life.

The pain of the eyes was in the *eyeballs*, and ran directly back to the brain, and to turn or move them was torturing. In fact the pain produced by the drug, wherever it occurred, was like that of rheumatism, pain with soreness. The conjunctiva was remarkably injected, and the eyes presented the appearance noticed in congestion of the brain. The pain in my eyes, together with the soreness, lasted three days.

The action of the drug on the nervous system is remarkable. It at first, when given in full doses, acts on the optic nerve, and in a little time it just as surely influences the par vagum, and to that degree it seems to interrupt the respiration. The interruption of respiration in my own case was so great as to prevent sleep, even if the pain had not prevented. The moment I would fall asleep the respiratory movement would cease, and it would not be resumed until awakened by the suffocation that resulted from the suspension of respiration.

GUARANA.

Authority. 5, V. Franque, Bayer. *Intell. Blat.*, No. 17, Schmidt, vol. cxv, p. 291 (*Sydenham Yearbook*, 1862, p. 459), effects of doses of 16 to 20 grains; 6, German authority, quoted in *Bost. Med. Journ.* (*New Remedies*, vol. v, 1876, p. 339), a patient suffering from facial neuralgia, due to a central lesion, took Guarana; 7, same, effects.

Giddiness.⁵—Tinnitus aurium.⁵—Dysuria is a frequent phenomenon.⁷—Redness of the face, staring eyes, slight irregularity of the pulse, moisture of the skin, delirium, dulness of hearing, and vesical and intestinal spasms.⁶—After its use in neuralgic headache, phenomena of its poisonous action may be observed from the appearance of a malaise, more distressing than the headache, which has disappeared under its remedial agency.⁷—Sensation of pricking and cold, extending to the whole cutaneous surface.⁵

GYMNEMA.

Gymnema sylvestre.

Authority. Dr. Falconer read to the Linnæan Society a communication which he had received from Capt. Edgeworth, *Pharm. Journ.*, vol. vii, 1847-8, p. 351.

Captain Edgeworth[•] chewed some of the leaves, and was surprised at not perceiving the acrid taste of the plants of this order; but about two hours afterwards, when taking some tea, he was greatly surprised to find that, although he could fully appreciate the aroma of the tea, he was perfectly unable to appreciate the taste of the sugar. He obtained some preserves and other substances containing sugar, and upon putting them upon the tongue, he found he was still quite unable to appreciate the saccharine quality; he then obtained some powdered sugar, and it appeared only like so much sand in his mouth. This effect lasted altogether nearly twenty-four hours, when he recovered the power of tasting sugar. Mrs. Edgeworth afterwards tried the effect of the plant, and with precisely the same result.

HELLEBORUS NIGER.

Authorities. **36**, Cattell, *Brit. Journ. of Hom.*, vol. xi, p. 343; **37**, J. Massey, M.D., *Lancet*, 1856 (2), p. 100, a woman took about a teaspoonful of a strong infusion; **38**, H. P. Gatchell, *Northwestern Annualist* (*Am. Obs.*, vol. xv, 1878, p. 518), Jan. 14th, took 2d at 3.30 P.M., repeated the dose at 4 and 4.30.

Mind.—Happy carelessness about everything; feel indifferent to family (after first dose),³⁸.—Alternate feelings of mirth and melancholy; great desire to laugh, followed by desire to weep (after first dose),³⁸.—Great feeling of self-confidence (after second dose),³⁸.—Feeling as from grief (after second dose),³⁸.—Moans (fifth day),³⁸.—Don't wish any one to speak to me or look at me (after first dose),³⁸.—Do not wish to speak; dread company (after second dose),³⁸.—[670.] Lay down in a kind of stupor; awake about an hour later refreshed by sleep (after third dose),³⁸.

Head.—Head confused, noise hurts, sound of wind distresses (after third dose),³⁸.—Brain feels too large (third day),³⁸.—Awoke with a sensation as if the brain were too large, with severe pain in the forehead, relieved by pressure; pain in paroxysms, aggravated by movement (fifth day),³⁸.—Brain too large in front; occiput feels empty; afterwards reverse in forehead, and occiput feels as if it would fall forward; disposition to lie down and roll head from side to side; feel helpless like an infant, as would like to lie in mother's arms; disposition to draw up feet like an infant (fifth day),³⁸.—Headache over eyes extending to temples, with a sensation as if the skin were drawn tight over the forehead, accompanied by a disposition to frown; weak feeling in head (after first dose),³⁸.—Temples feel as if they would burst (after first dose),³⁸.

Eye.—Aching pain in socket of eye; great desire to be in a dark room (after first dose),³⁸.—Prickling and burning of eyelids (after two minutes),³⁸.—Dimness of sight (after two minutes),³⁸.—[680.] Sight obscured (after first dose),³⁸.—In the morning, unable to read a letter for dimness of vision (sixth day),³⁸.—Dread light (fifth day),³⁸.

Nose.—Catarrh of left nostril (after first dose); increased (after second dose),³⁸.

Mouth.—Feeling as if cold air were passing through hollow teeth (after first dose),³⁶.

Stomach.—In the evening nausea, with extreme prostration, relieved by bitter vomiting, followed by a helpless feeling; indisposition to be spoken to, or to be looked at (third day),³⁶.—At night, nausea, prostration, and bitter vomiting (fifth day); nausea after eating (sixth day),³⁶.—At night, bitter vomiting (third day),³⁶.—Vomiting of a greenish, slimy substance,³⁶.—Burning in stomach (after second dose),³⁶.—[690.] Feel as if a fluid were pouring into stomach (after third dose),³⁶.—Lancinating pains from epigastrium to rectum (fifth day),³⁶.

Abdomen.—Distended abdomen, wind in intestines (after third dose),³⁶.

Rectum and Anus.—Pressing fulness in rectum (after first dose),³⁶.—Aching feeling in rectum (after second dose),³⁶.—Pressure in rectum (third day),³⁶.—Fulness in rectum (fifth day),³⁶.—Itching, as from ascarides (third day),³⁶.

Urinary Organs.—Great desire to urinate (after first dose),³⁶.

Sexual Organs.—Pain in region of right ovary (after third dose),³⁶.

Respiratory Organs.—[700.] Shortness of breath in reading or speaking (after first dose),³⁶.—Breath better with mouth open (after second dose),³⁶.—In the evening, breathing oppressed (third day),³⁶.

Chest.—Sharp pain in left breast near armpit; pain piercing (after second dose),³⁶.—Pain near right armpit (after third dose),³⁶.—On moving, pain in left breast and shoulder, extending down the arm to elbow (after third dose),³⁶.—On leaning over, pain in left breast (after third dose),³⁶.

Heart and Pulse.—Heaviness about heart (sixth day),³⁶.—Pain in region of heart (after second dose),³⁶.—Violent throbbing of the heart (after two minutes),³⁶.—[710.] Pulse small and feeble, 78 (fifth day),³⁶.

Neck and Back.—Pain under right shoulderblade (after third dose),³⁶.—Pain under left shoulderblade (after second dose),³⁶.—Aching pain in back above the waist, rocking from side to side (after second dose),³⁶.

Extremities.—At night after retiring, tearing and rending pains in joints, as if torn apart (fourth day),³⁶.—Pains like rheumatism in limbs; pains as if in the bones (fifth day),³⁶.—A paralytic feeling of the limbs. They feel large and heavy; can raise them with difficulty (sixth day),³⁶.

Superior Extremities.—Pain in left shoulder, which feels higher than the right (after second dose),³⁶.

Inferior Extremities.—Aching pain in lower limbs as they get warm (after second dose),³⁶.

Generalities.—Pain and pricking in the tongue, fauces, and throat. To use her own expression, "as if a hundred pins were sticking there." There was a painful sense of strangury and constriction of the throat, with difficulty of swallowing; pain at the epigastrium, and very violent sickness. The tongue began to swell, as well as the other organs of deglutition; much viscid mucus was voided from the mouth; the eyes were sunk; there was excessive prostration of strength; discoloration about the eyelids, with great collapse of the vital powers; the extremities were cold, and the general surface of the body was bedewed with cold, clammy sweat; pulse varied from 30 to 50 beats in the minute, very small, and at times scarcely perceptible.³⁷.—[720.] Tremor of the whole body (after the first dose),³⁶.—Great restlessness, excitable, impatient, hopeful; feel as if circulation increased; could run a race, accomplish great deeds, fearless; feel as if brain were boiling (after third dose),³⁶.—Great tranquillity and desire to

lie down (after first dose),³⁸.—Tired and sleepy (after first dose),³⁸.—Very tired (after third dose),³⁸.—Tired feeling all day (third day),³⁸.—Disposition to sit all the time (after second dose),³⁸.—Weakness (sixth day),³⁸.—Flesh feels soft (fifth day),³⁸.—Soreness in flesh (sixth day),³⁸.—[730.] Feel as if the flesh were sore, soreness on pressure over the whole body (fourth day),³⁸.—Feel as if the blood were thin and poor; feel listless and lifeless (after second dose),³⁸.

Fever.—Feel chilly, with dull pains in head (second day); sensitive to cold, with sharp needlelike pains in and about the eyes, with nausea (third day),³⁸.—Coldness of whole body (after second dose),³⁸.—Hands cold (after second dose),³⁸.—Cold feet (after first dose),³⁸.—Forehead feels hot to hand, wants ice on head (fifth day),³⁸.—Cold sweats,³⁸.

HOMERIA.

Homeria collina.

Natural order, Iridaceæ.

Common name, Cape tulip.

Authority. L. Pappe, M.D., quotes Dr. Laing, *Floræ Capensis Medicæ Prodromus* (Pharm. Journ., vol. xi, 1851–52, p. 40).

A Malay woman, somewhat advanced in years, with her three grandchildren, respectively of the ages twelve, eight, and six, ate with their supper, between 7 and 8, a small basinful of the bulbs. About 1 A.M. the woman awoke with severe nausea, followed by vomiting, and found the children similarly affected. She endeavored to call for assistance, but found herself too weak to leave her bed; and when, at 5 o'clock, assistance arrived, the eldest girl was found moribund and expired almost immediately. The little boy of eight years died an hour afterwards, and the youngest child was found in a state of collapse, almost insensible, with cold extremities, pulse scarcely 50 and irregular, pupils much dilated. The symptoms of the grandmother were nearly similar, but in a lesser degree, accompanied by constant efforts at vomiting. By using diffusible stimulants she and this child eventually recovered. Obstinate constipation prevailed.

HURA.

Hura crepitans, L.

Natural order, Euphorbiaceæ.

Common name, Sandbox.

Authorities. (1 and 2, Hamilton, Pharm. Journ., vol. iv, from Berridge's Collection, New Eng. Med. Gaz., vol. xi, 1876, 304); 1, Browne, effects of tasting the seed; 2, Mr. A. Robinson ate a kernel of the fresh seed; 3, Hamilton, Pharm. Journ., vol. ix, 1850, p. 131; 4, Dr. Lorentzen, from the Swedish, S. J. 170, p. 235, three servants ate a seed as large as a pigeon's egg.

It soon began to warm and scald his palate and throat,¹.—If a person eats even a single kernel he is usually attacked with severe vomiting and purging within a very few minutes after,².—In five or six minutes he grew very sick, and was purged, and vomited with great violence,².—After a few hours they experienced suffocation, nausea, violent burning in the throat; not relieved by water. The one who had eaten the shell with the seed was seized with violent vomiting and headache. The others suffered only from

nausea and violent pain in the stomach, vomiting once, and violent diarrhoea. They recovered after a little Camphor and Opium.⁴

HYDROCYANIC ACID.

Authorities. 69, Manchester Examiner (Pharm. Journ., Second Ser., vol. vii, 1866, p. 487), Catharine Joyce committed suicide with an overdose; 70, John W. Tripe, Brit. Med. Journ., Jan., 1877, p. 11, D. A. took Scheele's acid, death in eight or nine minutes; about 2 minims were found in his stomach; 71, Dr. Hunt, Med. Times and Gaz., 1878 (1), p. 37, a boy, at. three years, ate several bitter almonds; 72, E. W. Berridge, Am. Obs., 1876, p. 15-16 (Hom. Times, vol. vii, p. 12, of Retrospect of Literature), a girl took 1 grain.

Staggering, and soon fell to the ground; groaning; breathed quick; foaming at the mouth; hand clenched.⁶⁹—Eyes prominent and glistening; pupils slightly dilated and insensible to light; lips, as well as the tongue, purplish; gasping for breath with his mouth wide open; heart's action had ceased, whilst the breathing was irregular and gasping, and continued so for about two minutes, when he ceased to live; pulse scarcely perceptible; muscles of the arms relaxed; fingers contracted; skin clammy; a very small quantity of vomit on his beard and clothes.⁷⁰—[510.] Apparently unconscious, slightly cyanotic, and markedly pale, with eyelids closed; on raising the eyelids the pupils were seen to be moderately dilated; the arms were stiffened through tonic spasms of the muscles.⁷¹—She instantly jumped up, ran for a short distance, holding up her arms and gasping for breath, fell and became insensible, and was violently convulsed; muscles of the face undergoing great distortion, limbs spasmodically extended, and head drawn down upon the shoulders; she was then removed to a bed; whole body was drawn a little forward; the limbs fixed and extended in tetanic spasm; face swollen, turgid, and almost purple from congestion; jaws clenched, mouth covered with foam, eyes half closed, prominent, and glistening; pupils widely dilated, insensible to light; breathing slow, with deep prolonged inspiration, and uttering a low moaning and could not bear light; an hour and a half before death was insensible, face pale and cold, pupils contracted, respiration slow and stertorous, pulse quick and weak.⁷²

HYOSCYAMINUM.

Authorities. 8, J. S. Pearse, Lancet, 1876 (2), p. 319, effects of $\frac{1}{240}$ grain, dropped on the conjunctiva; 9, same, effects of injecting hypodermically.

Head.—Giddiness.⁹—[110.] Headache.⁹

Eye.—Injection of the conjunctiva.⁹—Dilatation of the pupil was very obvious, and usually present.⁹—As soon as the topical action commenced, misty vision was frequently complained of, which lasted from a few hours to four days. This was present in about half the cases, and varied from a slight dimness to an extent which rendered it impossible for the patient to read unless the print was within two or three inches of the nose. The time required to produce full dilatation was found to be about fifteen minutes; the longest being twenty-five minutes, and the shortest ten minutes. In no instance did it fail to produce its results; and in the majority of the

cases the dilatation was extreme, the iris being reduced to simply a narrow line. No diplopia was produced. There was total insensibility of the iris, lasting a variable time; the duration of dilatation also varied, lasting from two to twenty-one days.⁸

Face.—Flushing of the face.⁹

Mouth.—Dryness of the mouth and pharynx, coming on usually within half an hour.⁹

Pulse.—Pulse increased in frequency.⁹—Pulsation of the carotids was increased and visible on the surface in a few instances.⁹

Sleep.—Tendency to sleep.⁹

Fever.—The skin in some instances became hot as well as dry, and a rise in the temperature to the extent of 10° in an hour was noted where the full constitutional effects was produced.⁹

HYOSCYAMUS.

Authority. 97, Dr. Robert Clark, Montreal Med. Chronicle (Ranking's Abstract, 1858 (2), p. 159), a child, aged two years and a half, ate some seeds.

There was flushed and excited countenance, the restless and violent tossing, amounting almost to convulsions, the momentary listening to imaginary sounds, and the eager clutching at visionary phantoms; the brilliant eye, widely dilated pupil, hurried pulse, and labored respiration. There was a bright scarlet redness of the whole surface, exactly resembling that of scarlatina. It was not a mere flushing of the surface, but a well-defined papillary eruption, disappearing on firm pressure, but returning immediately when the pressure was removed. The mucous membrane partook to some extent of the same appearance as in scarlatina.⁹⁷

HYPERICUM PERFORATUM.

The following symptoms are taken from Stokes's original report, and are to be accepted in place of those in Vol. V.

Authorities. 5, August 18th, 1852, smelled and tasted tincture just set to macerate, in the evening (first day); took $\frac{1}{2}$ ounce tincture and walked out, 11 A.M. (second day); $\frac{1}{2}$ drachm tincture at 10.30 A.M. (third day); 1 drachm tincture (fourth day); $\frac{1}{2}$ ounce (fifth day); 1 ounce infusion at 11 A.M., 2 ounces more in afternoon (seventh day); 1 ounce infusion at 4.30 P.M. (eighth day); 5a, second proving, September 6th, took of infusion half a pint with 2 drachms of tincture for a mixture; infusion, 10 drachms between dinner and tea (first day); 3 drachms of infusion (second day); 1 $\frac{1}{2}$ ounce infusion (fifth day); 5b, third proving, September 17th, 10 drops in water of a dilution made with 20 drops tincture to 2 drachms of spirit, at 10.40 A.M. (first day); same at 8 P.M. (second day); 10 drops three times (third day); 10 drops at noon (fourth day); 20 drops on tongue twice, and took the whole lot prepared (fifth day); 5c, fourth proving, September 26th, took 3d cent. dil., 10 drops in water, 8 A.M. (first day); 10 drops at 11 A.M. (third day); 10 drops in the morning (fifth day); 5d, female prover, S. E. S., took 10 drops strong tincture three times a day, beginning October 11th, 1852; 5e, October 19th, second proving with 30 drops, three times a day, on the fourth day stopped the medicine, got an

olfaction of Staph., and then one of Chamom.; 5f, November 3d, 3 globules 3d dec. dynamization.

Mind.—Felt as if excited by tea, all day (second day); at night (third day).⁵.—Religious thoughts, hopeful (fourth day).^{5a}.—For a week past, impure ideas have very seldom presented themselves by day; the mind has been reposing on higher thoughts (seventh day).^{5a}.—Low spirits (fourth day).^{5c}.—Mind soberly inclined for three days (ninth day).⁵.—Mind disposed to be sad and tenderly melancholy (eleventh day).⁵.—Temper touchy, irritable; inclined to speak sharply (second day).^{5f}.—The tone of the nervous energy keeps up in a truly remarkable manner all through, and the mind is firm, and views all things with cool consideration (ninth day).^{5b}.—[350.] Made mistakes in writing, evening (third day).⁵.—Mistakes in writing, right for left, or ulna for radius (second day).^{5c}.—Forgets people's names (tenth day).⁵.—*Defective memory; can hardly arrange ideas, and cannot execute her intentions; forgets what she wanted to do* (fourth day). There have been several letters omitted in her written statement of symptoms, especially on the first and second days; the same state caused this as made her so forgetful, but it existed in a less degree.^{5e}.

Head.—Head feels dull (third day).^{5b}.—Felt the dull head clear up (directly after dose, fourth day).⁵.—Head dull, morning in bed (eighth day).⁵.—Head heavy in the morning, improved towards evening (tenth day).^{5c}.—Fulness of head (eleventh day).⁵.—Fulness of head and low spirits this morning, which passed off in two hours, and was followed by a feeling of stiffness in the eyes, as if after tears, and a strained painful feel in forehead, which went off after second dose (fifth day).^{5d}.—[360.] When she arose, felt the head full, which cleared about an hour after breakfast (after first dose).^{5f}.—Rose with fulness of head (second day).^{5f}.—Fulness and pain, with heat in vertex, before waking (fifth day).^{5f}.—Pain in head, worse after dinner (fifth day).^{5f}.—Pain of weight in head, generally on the passage of a heavy storm-cloud (seventh day).^{5c}.—Headache in forehead, as if it were smashed, increased at night, and on lying down; it increased next day, but was more towards the vertex (seventh day).^{5e}.—After breakfast, pressure on anterior and upper part of frontal (left side) bone (ninth day).^{5b}.—Pressure in left temple after breakfast (eighth day).^{5c}.—Attack of weakening, drawing pain in the scalp, over upper and anterior part of parietal bone (left), for a few minutes (fifth day).^{5b}.—Back of head feels bothered this forenoon (fourth day).⁵.—[370.] After breakfast immediately felt a severe scalp headache on the left side of occiput, sometimes it was sharp, at others dull (second day).⁵.—In the evening for a few minutes, felt as if a violent headache with pressure were about to come on in left side of occiput (first day).^{5b}.—Shoot of dull pain up left occipital nerve, forenoon (seventh day).^{5c}.—Creeping feeling in right side of occiput after dinner (eleventh day).⁵.

Eye.—After breakfast, slight aching over brows (ninth day).⁵.—Burning stinging in tarsi of left eyelids, at 9 P.M. (first day).^{5a}.—Sight weak (sixth day); very weak (eighth day).^{5c}.—Focal distance of vision lengthened, this evening (first day).^{5a}.

Ear.—Simple pain in right ear at entrance of meatus (eighth day).⁵.—Pressure in right ear, with excoriated feel in pharynx on that side, in the evening (eighth day).^{5b}.—[380.] Sharp itching in right ear, meatus; goes off by touch, comes again (first day).^{5a}.

Nose.—Sneezing, nose dryish (first day).^{5a}.—More than commonly sharp sneezing fit after breakfast, with free nasal secretion (sixth day).^{5c}.—

Sneezing leaves a raw soreness in throat (fourth day),^{5d}.—Nose dry on rising, and all day (third day),^{5b}.—Nose dry (fourth day),^{5b}.—Dryness of left nostril for a week past; crusts in it (fifth day),^{5c}.—Rose with pain in bridge of nose (second day),^{5f}.

Face.—Slight aching of the brows and face, which increased in the night to *severe distressing ache* in the right half of face, in an old tooth more particularly (first day),^{5a}.—*Dull faceache*, in afternoon and evening (second day),^{5a}.—[390.] The faceache left by diet and abstinence from all sorts of artificial stimulus (after nine days),^{5a}.—Face aching more or less all day (eighth day),^{5b}.—Sleep disturbed by a faceache, which came on in the afternoon, after eating mulberry tart (lasted fourteen hours), (third day); pain in face (left side) increased (fourth day),^{5c}.—After breakfast pressure on malar prominences (second day),^{5a}.—Pressure on malar bone, evening (fifth day),^{5b}.—Lips dry (third and fourth days),^{5b}.—Aching in the articulation of the jaws (second day),^{5f}.—At 10 P.M., lacerations from submaxillary gland of right side, down the neck, for a few moments (first day),^{5c}.—Last night had severe aching in an old stump of a right upper molar tooth, which kept me awake and restless; it was best lying on that cheek and keeping quiet (sixth day),^{5a}.—Took a glass of beer after dinner, and felt the old stump ache a little; it went on to ache *very badly* during the whole night (seventh day),^{5b}.

Stomach.—[400.] Appetite increased, in the evening (first day); in the morning (second and fourth days),^{5a}.—Appetite for pickles, in the evening (sixth day),^{5a}.—No great appetite for breakfast (third day),^{5a}.—*Thirst for wine*, in afternoon; took some (second day),⁵.—Eruptions after taking medicine, with taste of same (fifth day),^{5a}.—Eruptions after breakfast (second day),^{5c}; (ninth day),^{5b}.—Awoke in the night with great nausea (sixth night),^{5d}.—Flatulence and distension of stomach, after teatime (third day),^{5c}.—Indigestion and flatulence in the night; awoke with distension and cracking pain in lower belly (first night), which was relieved in the morning by relaxation of the bowels,^{5c}.—Ate plums and pickles, and had dyspepsia and bilious diarrhœa (after nine days),^{5a}.—[410.] Stomach feels contracted and hot, in the evening (third day),⁵.—After breakfast, pressure in the stomach, extending towards the back (fifth day),^{5a}.—After meat at breakfast, felt weight in stomach (eighth day),^{5a}.—On rising in the morning, the stomach felt hottish and uncomfortable, though only a small bit of bread and mashed potatoes were eaten for supper, with half a glass of port wine, in water; drank a glass of cold water and felt all right (ninth day),^{5b}.

Abdomen.—Dragging pain in liver at point of false ribs, at 6 P.M. (fifth day),⁵.—Weight and dragging in liver, walking from Torwood, 11.30 P.M. (eighth day),^{5b}.—In the night awoke with distension and cracking pains in bowels (sixth night),^{5d}.—Bowels full and flatulent, in the evening (second day),^{5d}.—Crampy pains in abdomen (twelfth day),^{5f}.—After tea pinching pains in bowels, which became much relaxed (fourth day),^{5d}.—[420.] In an hour felt pressure at left groin, towards ring (third day),^{5c}.—Pressure in right iliac fossa, towards the ring (first day),^{5a}.—Pressure on left inguinal ring, morning (sixth day),^{5f}.—**Rectum and Anus.** Peculiar slightly cutting warm pain all around rectum, internal to sphincter, forenoon (fourth day),⁵.—Rectum felt as if dry, in morning (seventh day),^{5b}.—Inclination to stool, at 6 P.M. (first day),^{5a}.

Stool.—Stool delayed till noon (fifth day),⁵.—Stool rather scanty and hard, and constipated (seventh day),^{5a}.—Free evacuation of the bowels this

evening (seventh day),^{5a}.—Free and normal evacuation of bowels (eighth day),^{5a}.—[430.] Firm stool, in the morning (first day),^b.—Soft, yellow, bilious stool, at 4 P.M.; had a firm one after breakfast as usual (second day),^{5b}.—Very free stool, bilious, soft (fifth day),^{5b}.—Stool very hard and knotty (seventh day),^{5b}.—Large, firm, hard, dry stool this morning (eighth day),^{5b}.—Tolerably good stool, at 10 A.M. (first day),^c.—Stool delayed till morning (ninth day),^{5c}.—Bowels irregular; relaxed without pain, morning or evening, for three days past (sixth day); constipation (seventh day); bowels irregular (eighth day),^{5d}.

Urinary Organs.—At 4 P.M., waking, felt pressive pains for a few minutes in the renal region (fourth day),^{5a}.—Squeezing pressure in the left kidney, momentary (after one hour, second day),^{5b}.—[440.] Biting stinging in orifice of urethra (fourth day),^{5c}.—Warm biting in urethra, afternoon (eighth day),^{5c}.—Urine turbid (seventh day),^{5d}.

Sexual Organs.—Afternoon while walking, erotic ideas and erection (first day),^{5b}.—Access of erotic ideas, very vivid for a quarter of an hour (immediately, second day),⁵.—Catamenia appeared this morning, with less trouble than usual; *greater quantity* (eighth day),^{5c}.—Catamenia *increased in quantity*; three days previous to their appearance, great pinching in abdomen, with diarrhoea; cold feet; headache, like wrenching pain over eyes, better in motion; very severe pains in back. Catamenia attended with sickening pains in belly, which she never had before, dull pain in head; sensitiveness of the auditory nerves. Menses three days too early (seventeenth day),^{5f}.

Respiratory Organs.—Some scraping and roughness in the larynx, and upper part of pharynx and nares, in the fog late at night (eighth day),^{5b}.—Slight bronchial catarrh, without pain or illness, caused by the night fogs (fifth day),^{5c}.

Chest.—Pressure on chest at nipples, with a peculiar warm kind of formication (third day),^{5a}.—[450.] After breakfast, pressure on outer third of left clavicle (seventh day),^{5a}.—After breakfast, dull heavy pressure on right side of chest from seventh rib down (fifth day),⁵.—Single thrill of shooting pain in left pectoral muscles (sixth day),^{5a}.—Dull stinging in right pectoral muscles, extending to back around ribs (third day),^{5b}.—Sticking pain in left chest, among the tendons of serratus magnus (seventh day),^{5c}.—Stinging-burning pain on edge of left pectoral muscle, noon, one minute (fifth day),^{5a}.—Creeping feeling in right breast up to the median line (eleventh day),⁵.

Pulse.—Pulse accelerated after dinner (second day),⁵.—Pulse 90, after breakfast, before stool, 10 A.M., fell to 80 at noon (seventh day),^{5c}.—Pulse 80 (eighth day),^{5c}.—[460.] Pulse 82, at 10 A.M. (ninth day),^{5c}.

Neck and Back.—Awoke with pain in right trapezius muscle, early in morning; it went off after washing (fourth day),^{5b}.—Aching of the back of the neck and upper part of shoulders (trapezius), (fifth day),^{5b}.—Severe pressive pain on top of right shoulderblade, afternoon (third day),^{5c}.—Pressive pain in left shoulderblade, after dinner (eighth day),^{5c}.—Cutting pains between shoulderblades on right side of vertebræ (tenth day),⁵.—Stinging in back, near edge of right scapula, near spine, morning (sixth day),^{5b}.—Cutting pain under left shoulderblade, with pressure in stomach, after dinner (seventh day),^{5a}.

Extremities.—Limbs heavy; felt fatigue in walking before dinner (eighth day),^{5c}.—All articulations feel bruised (ninth day),⁵.—[470.] Sawing pains in left hand and left inner ankle (eleventh day),⁵.—Tearing of

outside of right knee, followed immediately by severe pressure on upper part of shoulderblade (right), (seventh day),^{5a}.—Flying pains in right shoulder, and also in left calf (seventh day),^{5a}.—Lancing pains in left wrist and ankle, and along inner border of left foot (third night),^{5c}.—In bed, this morning, drawing under right malleolus and in right wrist, momentary; also sticking jerking on centre of back of foot, with fugitive feeling of fullness in left half of head (eighth day),^{5a}.

Superior Extremities.—This morning, slight rheumatic drawing aching in point of left shoulder (third day),^{5b}.—Slight pains in the shoulder-joints, especially the left one, forenoon (third day),^{5a}.—Numbness in left arm awoke her three times; it went off after friction (third night),^{5d}.—Pressure on right humerus, at insertion of deltoid (ninth day),^{5b}.—Hard pain running down left median nerve, followed by the above pain in front of thigh, in the evening (ninth day),^{5b}.—[480.] Slight ache in left elbow, passing immediately to right forearm (ninth day),^{5c}.—Pain in right elbow very severe (fourth day),^{5f}.—Weakness and strained feel in right elbow, troublesome a month back, has returned, and is *aggravated* by second dose to-day; worse in lifting (second day),^{5e}.—Right arm very weak and painful, just behind elbow-joint (second day),^{5f}.—Rheumatic pains in right elbow (fifth day),^{5f}.—Slightly lancing pains about head of right radius for a few moments (first day),^{5c}.—On going to sleep starting in right forearm above wrist (second day),⁵.—Pressive pains down left forearm, on ulnar side (fifth day),^{5a}.—Jerking of tendons in left wrist on going to sleep, (sixth day),⁵.—Pressive lancing pain on the middle metacarpal bone of left hand (back), morning (sixth day),^{5b}.—[490.] Lancing pains in joints of left hand fingers (first day),^{5a}.—Strained pain between index and thumb of left hand, at 1 P.M. (eighth day),⁵.—Lancing pain in phalanges of middle and little fingers of right hand (fifth day),^{5c}.—Cutting pains in the fleshy ends of fingers, of late several times (sixth day),^{5c}.

Inferior Extremities.—Crampy feel in the lower part of *gluteal muscles, right hip*; immediately on its disappearing, flashing pain on back of left toes, 5 P.M. (ninth day),^{5b}.—Drawing in left buttock, under tuber ischii, with same in right wrist, slight (ninth day),^{5b}.—At night, after a walk, strained feel in right ham (first day),^{5b}.—Pain in inner condyle of right thigh for a moment; morning in bed (eighth day),⁵.—On walking in the afternoon, felt a bruised pain in left thigh; muscles supplied by anterior crural nerve are stiff and sore; this lasted some days, going and coming (ninth day),⁵.—Left thigh sore and lame (tenth day),⁵.—[500.] About midday the *pain in front of left thigh* returned, and came and went frequently (first day),^{5c}.—Pressive pain on centre of front of left thigh, afternoon (fifth day),^{5c}.—Pains in left thigh as before (sixth day),^{5c}.—Slight shoots down the great sciatica on back of pelvis, in bed at night (eighth day),⁵.—Pain in right knee, morning (ninth day),⁵.—Starting of left leg on going off to sleep (third day),⁵.—Numbness in legs (twelfth day),^{5f}.—Left leg numb, in evening (first day),^{5f}.—Left leg numb (second day),^{5f}.—Slight numbness in left leg after first dose (second day),^{5e}.—[510.] Cramp in left leg on going to sleep (fourth day),^{5d}.—*Severe deductive pains down nerves* of right leg, for a few moments, afternoon (fifth day),^{5c}.—Flashes of weakening drawing pain all over front of left leg, all the afternoon, either walking or sitting (fifth day),^{5b}.—Last night at 12 o'clock, coming home, felt a sudden shoot of pain all over the front of left leg, apparently in the periosteum, it recurred two or three times, and several times to-day (fifth day),^{5b}.—Single biting on left shin (seventh day),^{5b}.—Biting on front of left

shin, evening (seventh day),^{5b}.—Biting on left shin (ninth day),^{5b}.—Tendency to tingling in leg, particularly the left one (fifth day),^{5a}.—Pressure on left calf, as of a blunt point, several times (eighth day),^{5b}.—Painful drawing in right tibialis anticus (after one hour, second day),^{5b}.—[520.] Drawing in right calf (first day),^{5a}.—Sticking stitching in inside of right calf in walking, momentary, 4 P.M. (eighth day),⁵.—At breakfast felt a pressive drawing in the right tendo Achillis (sixth day),^{5b}.—Left ankle particularly liable to wrench (ninth day),⁵.—Cramp in left foot on going to sleep (third night),^{5d}.—Pressive drawing on inner border of left foot, forenoon (sixth day),^{5b}.—Twinges of pain along the external border of left foot, after dinner (third day),^{5c}.—Lying in bed, the feet seem disposed to tingle (second day),^{5a}.—On falling asleep at night, felt a slight jerk in toes of left foot (fifth day),^{5b}.—A gnawing in right toes, succeeded by pressure and aching in middle of left thigh, about where the sartorius crosses (ninth day),^{5b}.—[530.] *Frequent biting stinging in toes of right foot* (third day),^{5a}.—Single biting on a toe of right foot (eighth day),^{5b}.—In the morning early, stinging biting in back of toes, on right foot, in attacks of a few moments (second day),^{5a}.—Slight laceration, in fold of skin, internal to great toe-nail of right foot, for a quarter of an hour (after dose, fourth day),⁵.

Generalities.—Felt rather dull this morning, and languid; a dull day (third day),⁵.—On rising, feel rather weary and have foul tongue (fourth day),⁵.—Feel rather dull to-day (fourth day),^{5a}.—Weary and heavy all day (eighth day),⁵.—Unrefreshed on waking; languid in the morning; felt better towards noon (third day),^{5c}.—At various times has felt fugitive pains in the face, shoulders, limbs, and fingers, of a laming character (twelfth day),^{5c}.—**Skin.**—[540.] Papule on the middle of the right sterno-mastoid muscle, such as had appeared before on the chest (fifth day),^{5b}.—Pimple on back, right side (fifth day),^{5a}.—Very small pimple or boil on right hip (sixth day); pimple rather sore under the friction of the clothes (seventh day),^{5c}.—A cluster of itching, psoralike vesicles on root of left thumb, in forenoon; gone at night (ninth day),⁵.

Sleep.—Felt as if under the influence of tea, and went to bed with the brain excited; did not sleep soundly. Dreams vivid and active; next morning found myself lying very much on the back and digging the head backwards into the pillow (first night). Dreams active, confused (third night). Lay a good deal on back; sleep uneasy; threw the head back, and kept on jerking it backwards (sixth day). This morning conscious of anxious dreams, as if something important were left undone (seventh day). Dreams busy (eighth night). Dreams full of bustle (ninth night),⁵.—Sleep disturbed and uneasy from *faceache* (first night). Passed a *bad night* from horrid sexual dreams; disturbed sleep (second night). Dreams horrid and agitated, sexual (third night),^{5a}.—Dreams confused (third night). In spite of a bad night rose feeling well (eighth day). At night got late to bed, and dreamed awful horrid dreams, as that God was far from me and repudiated me, etc. (eighth night),^{5b}.—Sleep full of dreams of Mormons, of horses, fights, and great action (first day). Found myself very early in the morning *lying on my back*, dreaming some desperate horror, and half awake, saying to myself, "Why should I fear, the Lord is around and about me" (second day). Sleep disturbed by all sorts of horrid dreams; starting of the legs when falling asleep; slight convulsive shocks and twitches following up, preventing sleep; singular erethic state of nervous system all night; erotic ideas and dreams (third night). Dreams active

(fifth day). Sleep disturbed by active dreams (eighth night),^{5c}.—Restless night (third night),^{5d}.—Sleep lighter, and is more refreshed by it (tenth day),^{5e}.—[550.] Slept badly; *dreams of distress* (second night). *Dreams distressing* (third and fourth nights),^{5f}.

Fever.—About four hours after first dose felt a great coldness and numbness of left leg, for ten minutes, while sitting;^{5e}.—Feet cold (tenth day),^{5e}.—Face hot and smarting, for two hours (third day),^{5f}.

INDIUM METALLICUM.

Authorities. 15, E. W. Berridge, U. S. Med. Invest., vol. iv, 1876, p. 573, took 24 globules 100,000th (Fincke); 16, same, A. de Noe Walker, took 15 globules of same at bedtime.

Head.—On waking, the *contents* of the cranium, not the parts covering it, felt bruised,¹⁶.

Respiratory Organs.—His habitual expectoration from the bronchia in the morning was freer, and on one occasion, a speck of blood appeared on the rather thick mucus,¹⁶.

Back.—When going downstairs, sudden pain in left sacral region (ninth day),¹⁵.

Extremities.—Hands and arms tremble,¹⁶.—Decided feeling of weakness and tremor of the thighs and knees after a short walk,¹⁶.—[240.] Legs from knees downward, including the whole foot, feel heavy, as if loaded,¹⁶.—When walking in evening after sunset, frequent sudden pains in bend of left thigh anteriorly, making me stop walking (fifth day); the same, but less, in morning of sixth day,¹⁵.

Sleep.—The following night, vivid dreams of what had most preoccupied his mind during the day, *i. e.*, lectures and clinical studies,¹⁶.

INULA.

Authorities. 2, Edward Bayard, M.D., Trans. Amer. Inst. of Hom., Seventeenth Session, 1860, p. 58, chewed a portion of the root and swallowed the juice; 3, same, Dr. Joslin, took 5 globules of 12th, at 9.24 p.m.

Head.—One severe darting at the junction of the forehead and right temple (after one hour and thirty-six minutes),³.

Nose.—[110.] Obstruction of the nostrils, with smarting and sensation of heat in the left side of the throat (after eighty-six minutes),³.

Mouth.—On the succeeding day at dinner there was complete loss of taste. Highly flavored butter was merely felt as an unctuous substance, and no flavor was perceived in any other food. On examining his tongue he found it covered with a thick and very white coating. The sense of taste gradually returned and the tongue gradually cleared, so that after several days, both were in the same normal condition as before the experiment.²

Throat.—Painful pressure on the left side of the throat, as if with the end of a finger or some blunt instrument, in the morning at 7.45 (after four days and a half),³.

Stomach.—Slight nausea, with pain over the eyes (after six minutes),³.

Abdomen.—Flatulent colic just below the umbilicus, commencing after being awake at 1 A.M., and continuing for nearly half an hour whilst walking in the open air, and mitigated by the expulsion of flatus (second

day),³.—Flatulent colic similar to the former, in the same locality, in the forenoon (third day),³.

Stool.—It the morning after breakfast, at the usual time of evacuation, had a stool more soft and copious than usual (second day),³.—Waxy faeces; the stool approaching the shoemaker's wax in its dark-brown color, its tenacity, and its fineness of texture (after three days and a half),³.

IODUM.

Authorities. 68, T. Mc. J. Cowley, M.D., Canada Med. Journ., vol. viii, 1871, p. 54, a child, aged fourteen months, swallowed $\frac{1}{2}$ ounce of tincture, recovery; 69, Wm. M. Ord, M.B., Brit. Med. Journ., June, 1877, p. 671, a boy, aged three years, swallowed an unknown quantity of the tincture.

Eye.—Eyes suffused,⁶⁸.

Mouth.—Great irritation of mouth and throat, and a croupy cough,⁶⁹.

Throat.—Constriction in throat,⁶⁸.

Stomach.—Vomited immediately,⁶⁹.—Obstinate vomiting,⁶⁸.—Great tenderness over the epigastrium,⁶⁸.

Urinary Organs.—The urine passed the day after the accident was amber-colored, specific gravity 1038, somewhat strongly acid, throwing down on cooling a slightly flocculent sediment, amorphous under the microscope. The addition of acetic or nitric acid to the urine produced a copious amorphous precipitate, soluble in excess of nitric acid and on the application of gentle heat. On subsequent cooling a precipitate again fell, and was found to consist of yellow halberds of uric acid mixed with fine granular matter. No precipitate was obtained on boiling. No albumen. There was large excess of urea. Mr. Stewart obtained good reactions of iodine, combined, not free, and of indican. A day later the specific gravity had fallen to 1025; the other actions were as before,⁶⁹.

Respiratory Organs.—[910.] Respiration hurried,⁶⁸.

Generalities.—Pale and restless,⁶⁸.

IPECACUANHA.

Authorities. 29, T. W. Sheriff, M.D., Bost. Med. and Surg. Journ., vol. xlii, 1852, p. 391, feeling unwell, I took a scruple in a wineglass of water; 30, E. W. Berridge, U. S. Med. Invest., vol. iv, 1876, p. 574, S. Morrison triturated 30th dec.

After working nearly two hours, uneasiness in *right* eye (which was nearest the drug), and found on inspection, that the palpebral and ocular conjunctiva were congested. There was also considerable sneezing. Went on with the work for another hour, then ceased for two hours, from 6 to 10 P.M.; but just before doing so noticed the left eye becoming affected. On resuming the work, the eyes got worse, and within an hour more were as follows: Conjunctiva highly inflamed, causing a *painless* feeling of obstruction, with nasal catarrh, but no lachrymation or impaired sight. Next morning the congestion had increased, still without pain; the catarrhal symptoms had disappeared. This congestion lasted three days. In thirty days the palpebrae commenced to swell, scalding lachrymation came on, and the appearance of the eyes became worse. Aconite lotion removed this,³⁰.—In five minutes the mucous membrane of my nose, mouth, and throat became violently irritated. Urgent dyspnoea came on, my nostrils

were impervious to air, and I had to sit erect and actually gasp for breath. Yellow-colored water began to run from my nostrils, which soon changed to bloody serum; my mouth and throat appeared much inflamed, and discharged much thick slime and mucus. In an hour I vomited freely with some relief, but for three weeks I had severe cough and great tenderness in my chest,²⁹.

IRIS VERSICOLOR.

Authority. 18, Dr. C. H. Weaver, *Hale's New Remedies*, 2d edition, p. 1103, proving by Dr. Weaver; 19, same, proving by N. F.

July 25th. At 1 A.M. took 8 drops, an immediate feeling as though the brain was partially narcotized, soon followed by sharp, cutting pains darting through the temples; also in the elbows and biceps muscle; also feeling of contusive lameness in the last-mentioned parts.

4 P.M., took 10 drops; acid, peppery taste in the forward half of the tongue; sore and raw feeling in the throat, especially around the epiglottis, with hoarseness; a stuffed-up, smarting sensation in the posterior nares, as from a recent cold, increased secretion of nasal mucus; griping in the bowels, with several light, but somewhat acrid stools. The proving was continued two or three days, but about the same sensations were produced.

August 31st, 5 P.M., took 10 drops; peppery taste in mouth; stinging, sharp pains in temples, but dull in vertex and over the eyes; very sharp acrid feeling near epiglottis, with hoarseness. At 8 P.M., 10 drops; passed a very restless night; was troubled with frightful dreams and fancies. 7 A.M., feeling as if intoxicated; stinging, rheumatic pains in elbows and forearms, and in knees; pulse slow and labored, but considerable heat of skin; up to 12 M., headache of a nervous, gastric character; stinging pain in right shoulder; constriction in chest and at middle of sternum; acute, distressing pain in stomach; continued stuffed-up feeling in posterior nares, and nasal sinuses, with discharge of thin, clear mucus; continual snuffing and occasional sneezing throughout the day, and hoarseness; passed considerable limpid urine frequently. About 4 P.M., began to feel very weak; griping in the bowels and soreness over the surface of the abdomen; also great soreness and harshness of the muscles of the neck; somewhat feverish, with intense itching in various parts of the body.

September 1st. Arose feeling weak, passed a very copious, mushy, light-colored stool; have still a dull headache, with some sharp stitches through the temples; but the most marked symptom is a sharp, raw, excoriating feeling in both nares, with constant inclination to empty the nose; discharge of nasal mucus is very free; sneezing constant for the space of twenty minutes. 6 A.M. took 15 drops; sharp, aching pains in shoulders, arms, and especially the first finger of the left hand; increased hoarseness; nausea; almost constant weakness, so increased towards evening, with terrible headache and giddiness, that I was obliged to cling to my horse for support in the saddle; fell two or three times in walking to my room, but after a cup of warm tea and a little *Nux vomica* am able to get about; next day headache continues, and not until the expiration of a week does it feel quite easy; also the discharge of mucus from the nose is very profuse, in fact, almost incessant for ten days, the bronchia being also affected in a similar manner, but less severe; it felt and acted like a severe attack of catarrh, with influenza, and had I ever been affected in a like manner before I should think it the result of a severe cold.

NOTE.—A marked symptom observed in three former provings, upon as many persons, was troubled and lascivious dreams, with a profuse, involuntary emission of seminal fluid,¹⁸.

Took three pellets medicated with the 1st dec. dilution four times daily. The following were the principal sensations: Constrictive, pressive feeling about the sternum; shortness of breath; sharp cutting pains through the temples, with dimness of vision; gripping in the bowels, with profuse light-colored diarrhœa, so prostrating that he is obliged to discontinue the proving,¹⁹.

JABORANDI.

Authorities. **23**, Mr. John Tweedy, Nashville Journ. of Med. and Surg. (New Eng. Med. Gaz., vol. xi, 1876, p. 336) conclusions from experiments on himself; **24**, John M. Keating, M.D., Philad. Med. Times, vol. vii, 1877, p. 434, Dr. Hull took one scruple of the leaves in infusion; **25**, J. B. Tyson, M.D., Am. Journ. Med. Sci., 1877 (2), p. 132, A. C. took a drachm of the powdered leaves infused in about 8 fluid ounces of water; **26**, same, L. D., a woman, took the same; **27**, C. M., a man, took the same.

Contraction of the pupil. Tension of the accommodative apparatus of the eye, with approximation of the nearest and farthest points of distinct vision. Amblyopic impairment of vision from diminished sensibility of the retina. The effects, however, do not last long. In his case the approximation of the near and far points of distinct vision declared itself in a quarter of an hour, and reached its maximum in about forty minutes. It then gradually subsided and entirely passed off, and the eye resumed its normal state in about an hour and a half,²³.—Passed 960 cubic centimeters of urine in the twenty-four hours, containing 19 grams of urea (before experiment); 1026 cc. of urine, containing 20.7 grams of urea (in twenty-four hours after experiment),²³.—Passed 1000 cc. urine, sp. gr. 1018, in twenty-four hours, containing 19 grams of urea (before experiment); 900 cc. urine, sp. gr. 1022, containing 27 grams urea (after experiment),²⁶.—Passed in twenty-four hours 1620 cc. urine, sp. gr. 1018, containing 24.3 grams of urea (before experiment); 1800 cc. urine, sp. gr. 1012, containing 27 grams urea (after experiment),²⁷.—The first effect, which came on about eight minutes after drinking the infusion, and chewing and swallowing about one half of the leaves, was a profuse flow of saliva, which continued about three hours. During this time at least thirty or forty ounces must have flowed. Following closely upon this was the diaphoretic effect, which was extremely profuse, the perspiration running off in drops, and saturating everything. In about half an hour sudden and severe pain was experienced in the bladder, shooting down to the urethra, and causing exclamations of pain. This was followed by cutting pain in the lower bowel, though there was no tendency to diarrhœa. It became so severe as to necessitate an opium suppository, which afforded great relief. About this time (one hour after taking the drug) cardiac irregularity was noticed, with great weakness and rapidity of action, and a nervous, restless condition, with a constant yawning. There was gradually developed a dimness of vision, and soon surrounding objects, beyond a couple of inches from the eye, became indistinct. A watch held closely could be read with ease. This condition lasted several hours, when nausea came on, followed by severe vomiting, ejecting the contents of the stomach, finally bile, and then

passing off as a continued retching. The unpleasant effects were counteracted by the administration of whiskey, about two drachms, in water, and I fell asleep to awake next morning in a weak, languid state, with excessive dryness of mouth and continued thirst,²⁴.

JATROPHA.

Authorities. **33**, Dr. C. Hering, *North Amer. Journ. of Hom.*, vol. iv, 1851, p. 447; **34**, E. J. Waring, *Pharm. Journ.*, 2d Ser., vol. vii, p. 554, a young Hindoo swallowed three or four fresh seeds of "*Curcas multifidus*;" **35**, Dr. Marrett, *Madras Med. Journ.*, 1861, p. 37 (*Pharm. Journ.*, 2d Ser., vol. vii, p. 553), a person swallowed fifteen to twenty seeds.

Within an hour and a half after ingestion, burning sensations in the throat and stomach commenced, followed by profuse purging, vomiting, violent cramps of the extremities, which subsequently extended to the muscles of the abdomen and back, and occasional twitchings of those of the back, almost like those observed in tetanus. This was followed by deafness, and although the patient seemed all the time to be quite sensible, he failed on recovery, which occurred after two days of intense suffering, to recall any of the events of his illness subsequent to the occurrence of the purging, which was one of the earliest symptoms,³⁵.—Violent purging and vomiting, intense heat and pain in the stomach, with great prostration of the vital powers, were the principal symptoms,³⁴.—In Cuba, it is said that placing the hands in cold water will cause the effects to cease,³³.

JUGLANS CINEREA.

Authorities. (J. C. Burnett, M.D., *Month. Hom. Rev.*, vol. xxii, 1878, p. 205); **6**, Paine, the eclectic, effects of doses of 1 to 2 grains Juglandin; **7**, Dr. Burnett prescribed Juglandin for acne of the face in an otherwise healthy young man, who took 1-grain doses three times in one day; **8**, a healthy lady, æt. forty years, took 1st for eczema of the hands; afterwards the 30th produced all the same symptoms, except the chest pain.

Very pale complexion,⁸.—Very slight nosebleed daily, for five or six days,⁸.—Feeling as if all the internal organs were too large, especially those of the left side,⁸.—[160.] It acts as a drastic purge, producing irritation and inflammation of the mucous membrane of the bowels,⁶.—Pain in centre of chest at various times, by day and night, with a foreboding feeling at night; walking about did not aggravate the pain,⁸.—At 6 p.m. felt whilst walking, a sharp wrenching pain in the left side, a suffocating sensation in the chest, which compelled him to stand still for some minutes for breath, which, however, did not alleviate the pain. Immediate relief from 5 drops of *Bryonia* *℥*. When describing the suffocating sensation in the chest, he placed his hand on his sternum, and gave a vivid picture of an attack of angina pectoris,⁷.—Feels very ill, all-overish, as if a bad illness were coming on,⁸.—If continued, it is followed by a peculiar exanthematous eruption, very much resembling the flush of scarlatina,⁶.

JUNIPERUS VIRGINIANA.

Authorities. **10**, Wm. A. Hammond, *Ranking's Abstract*, vol. xxix, 1859, p. 355, a healthy man, æt. thirty-five years, took within twenty-four hours

16 ounces official infusion of the berries ; **11.** W. P. Bolles, M.D., Boston City Hosp. Report, 1870, n. 270, fatal poisoning of Mary H., æt. nineteen years, by 1 ounce of the oil.

The average condition of his urine for the three days immediately preceding the investigations was as follows: Quantity 1237.5 cubic centimeters; sp. gr. 1022.50; total solids 61.23 grams, of which 23.12 were inorganic, and 38.11 organic matter. It was of ordinary color and odor, and of strong acid reaction. The first day after taking drug the quantity of urine amounted to 1732 cubic centimeters; sp. gr. 1016.38; the total solids 62.75 grams; of this amount 25.43 grams were inorganic, and 37.32 organic constituents. The urine was of a pale-straw color, and gave off the characteristic odor produced by Juniper. The reaction was feebly acid. The quantity of urine passed on the second day was 1885.2 cubic centimeters; sp. gr. 1014.15; and the total solids 58.49 grams, of which 22.17 were inorganic, and 36.22 organic matter. The physical characteristics were similar to those of the first day. The reaction was barely acid. On the third day the quantity of urine was 1672.5 cubic centimeters; sp. gr. 1018.41. The total solids 63.27, of which 27.50 were inorganic, and 35.73 organic matter. The physical characteristics and reaction were the same as on the previous day.¹⁰—Insensible and almost pulseless, groaning with every breath, rigid and somewhat convulsed, with twitching of the eyeballs, and a strong odor of "oil of cedar" in the breath.¹¹

KALI ARSENICOSUM.

Authorities. (Berridge's Collection in Appendix to Brit. Journ. of Hom.); **4.** Mr. R. Jones, Prov. Med. and Surg. Journ., vol. vii, 1844, p. 127, Miss B. took it for chronic psoriasis, which was relieved for a time, but returned in an aggravated form; she then took it three times a day for a month, beginning with doses of 5 drops, and gradually increasing to 15; **5.** Dr. James Begbie, Edinb. Med. Journ., vol. iii, 1858, p. 961, effects in eight or ten days of moderate doses, say 5 drops, largely diluted, two or three times daily; **6.** Dr. John Elliotson, Med. Times and Gaz., 1858, New Ser., 16, p. 524, a lady took 2 minims three times a day for rheumatism; **7.** Dr. Thomas Skinner, Brit. Med. Journ., 1858, p. 778, a woman nursing her first child, took two doses of 30 drops for eczema of scalp and face; **8.** Dr. Arthur Leared, Med. Times and Gaz., 1863 (1), 63, effects in two cases of phthisis; **9.** Dr. Robert McNab, *ibid.*, p. 297, a woman, æt. twenty-eight years, took 3 minims three times a day for lupus of face; **10.** Dr. Duffin, Lancet, 1869 (2), p. 508, a woman, with chronic psoriasis, took 3 minims three times a day from September 3d to 19th.

Mind.—Nervous depression,⁵—Great nervousness (after five days),⁶.

Eye.—Redness of eyes (after five days),⁶.—[40.] Sense of heat and itching of eyelids, to which succeed swelling and tenderness; the conjunctiva becomes inflamed, the eye sensitive to light, and the orbit surrounded by a dark discoloration,⁵—Itching of conjunctiva,¹⁰.

Face.—Face pale (after five days),⁶.

Mouth.—Gums swollen and tender,⁵.—Tongue clean and red, like raw beef,⁴.—Whitish tongue,¹⁰.—The tongue is coated with a white silvery film, like that produced by touching its surface with a weak solution of lunar caustic,⁵.—If the remedy is persisted in salivation ensues,⁵.

Throat.—Throat dry and sore,⁵.—Sense of constriction of throat, and copious flow of saliva,⁴.

Stomach.—[50.] Appetite lost (fifth day),⁶.—Intense thirst,⁴.—Nausea (after five days),⁶.—Constant pain and nausea after food, and frequent vomiting of all ingesta,⁴.—In one it caused a sinking sensation at epigastrium, accompanied with faintness,⁸.—Sense of weight after eating (after five days),⁶.

Abdomen.—In one it caused pain in bowels,⁸.

Stool.—Diarrhœa,⁸.—Unable to sleep, owing in some measure to frequent stools, which are white, watery, and frothy,⁴.—For last six weeks subject to obstinate diarrhœa, and has now the following symptoms: frequent griping pains in bowels, with almost constant desire for stool; considerable tenderness over whole abdomen, which is distended,⁴.

Urinary Organs.—[60.] Marked increase of the quantity of urine occurs, not infrequently with a free deposit of lithates,⁵.—Urine scanty, high-colored, and passed with effort,⁴.

Sexual Organs.—Menses absent,⁴.

Respiratory Organs.—Some gastric cough, and frequent raking of throat and fauces, of a muco-purulent secretion, mixed with specks of blood,⁴.

Chest.—It stopped the milk entirely, but it was afterwards restored by treatment,⁷.

Pulse.—Acceleration of pulse,⁵.—Pulse 100, small and feeble,⁴.

Back.—Much pain and tenderness down spine,⁴.

Extremities.—Aching pain in right shoulder and elbow, which on the following day was associated with a copious and well-marked eruption of herpetic vesicles over the integuments of arm and forearm,¹⁰.—Crampy feeling of lower extremities, with partial loss of motion and sensation; they are much swollen, livid in places, and showing a tendency to slough,⁴.

Generalities.—[70.] Great emaciation,⁴.—Tremor,⁵.—Frequent muscular tremors,⁴.—Strength lost (fifth day),⁶.—Faintness,⁵.

Skin.—One of the earlier signs is a minute papular rash, which by-and-by assumes the form of delicate brownish scales, giving the skin an unwashed appearance; this has been most observed over those parts of the skin which are protected from light by clothing,⁵.—After taking it for three weeks, suddenly, after feeling ill for a few hours, a copious rash made its appearance on face, hands, and chest, resembling that of measles, the macule being slightly elevated, with intervening space of skin little affected, and showing papules in some places, vesicles in others. It was accompanied by general catarrhal symptoms, swelling of face, lips, and eyelids, burning heat of skin, yellow-furred tongue, gastro-intestinal irritation, and intense tenderness of feet, so much so that standing gave great pain. These symptoms were followed in a few days by complete aphonia. Desquamation commenced about the tenth day of this eruption, but the redness of the skin did not entirely disappear for some weeks,⁹.

Fever.—Skin cool and dry,⁴.—Increase of heat and dryness of skin,⁵.

KALI BICHROMICUM.

Authorities. (59 and 60, Taylor's Med. Jurisp., 1873, p. 323); 59, Dr. H. C. Andrews reports a case of the poisoning of a man, æt. thirty-seven years, by about 2 ounces; 60, Mr. Wood reports the case of a woman

who was poisoned by 2 drachms, and died in four hours; **61**, Ducatel, Journ. de Chim. Med., vol. x (Contribution a l'Etude de l'Acide Chromique, Henri Rousseau, Paris, 1878), a man sucked a little through a siphon.

In about two hours he was apparently in a dying state, suffering chiefly from severe cramps, the pupils were dilated, the pulse was scarcely perceptible, and there was vomiting and purging of greenish-colored evacuations. In about nine hours the violent symptoms abated, and the man complained only of great pain in the shoulders and legs,⁵⁵.—[1690.] In the first two hours she suffered from violent vomiting and purging, the vomited matters being of a yellow color. When admitted to the hospital she was in a dying state, pulseless, unconscious, and breathing slowly, with great effort. The skin was cold, the lower lip swollen and purple, and the tongue swollen,⁶⁰.—Great heat in the throat and stomach, followed by vomiting of mucus and blood, which continued till death, five hours after the accident,⁶¹.

KALI BROMATUM.

Authorities. **64**, Humerdinger die Wirkung des Broms und ein Brompreparat, Inaug. Diss., Tübingen, 1838; **65**, Dr. David Lees, Hom. World, vol. xii, 1877, p. 371, a child, æt. nine months, took 9 drachms, in fourteen or fifteen days, for epileptic convulsions; **66**, B. Fincke, M.D., The Organon, vol. i, 1878, p. 343, a young surgeon took 10 grains in one dose, for excessive sexual excitement after mental overwork.

Peculiar biting salt taste of the drug lasted a long time,⁶¹.—Frequent micturition,⁶¹.—He immediately had burning in stomach, going into aching, empty gone feeling relieved by eating, for from one to two days. Then urinary symptoms; passed water in immense quantities, with distress, as if so full that he could scarcely contain himself; frequent urination, very pale, watery, every five or ten minutes, for a week (in one day amounting to a gallon). The sixth or seventh day, suddenly, a neuralgia in spine came on, after throbbing from head to feet, worse in abdominal organs, commencing in lumbar region, spreading up to dorsal region, and down to coccyx, and going around the body half way, going into the intestines, and all through him; dull pain at the time, sometimes sharp twinges going up and down the marrow. Nothing would relieve the pain. Craving for wine. The very thought of tobacco nauseated him, though used to take a cigar after dinner. Port wine relieved the pain by making him eat, though he threw up his dinner. The pain seemed to go away by that time (one to two days). He took one dose *Kali brom.* 1 m. (Fincke) double graft, which did nothing while he had this pain, also *Nux vom.* 1 m., which did not seem to act. He threw himself down, closed his eyes, seemed above the earth, as if he were in a higher plane (twenty minutes after taking), feeling quite happy, as if his happiness was not of the earth. The digestive symptoms commenced soon after taking. Aversion to coffee, which he used to drink. When the neuralgia left him these urinary symptoms commenced: pain on urinating, smarting, burning pain, sensation on urination as if a shot were forced from the bladder along the urethra, passing constantly large quantities of water. Just at the last drop of urine, spasmodic constriction of urethra about the lacuna, with real, sharp pain running along back in the bladder, like forcing a large instrument in a small place. Then a regular gonorrhœa set in, whitish-yellow discharge for two or three days (never had

anything the like). Every second or third day the smarting came on late in the afternoon, and kept him awake all night. He now passes less water. *Canth.* 2 c. and *Cann. sat.* did nothing. Only bathing the parts in ice-water gave relief. Since the gonorrhœa the sexual excitement subsided. The urinary symptoms irritated him most; he cannot do anything, cannot go into society. If he sees *Bromide of potassium*, or any kind of Potash, it makes him sick in the stomach. Hands tremble. On November 9th gave him *Camphor* (Borneo) 9 m. (Fincke) seven powders, one every night. On November 11th had an awful time, burning and smarting in urethra, could only get relief by injection of cold water. November 16th, to-day and yesterday passed much water without smarting, had not to get up at night. The urine was free from sugar and albumen. Last night, after a slight burning and a sensation of a ball passing forced from behind at the neck of the bladder, passed about $\frac{1}{2}$ ounce of liquid like white of egg, with a little mucus like milk, without seminal smell (? prostatic). Since then everything is right, and he is himself again. Yesterday morning terrible pain in right eye, as if it were pressed out (*Camphor symptom*),⁶⁶—The convulsions disappeared as the eruption came out. Each spot of skin disease seemed to have commenced as a papule of acne. This enlarged and spread, and the elevated spots became united in areas. On these areas peculiar yellowish points then were developed beneath the surface, neither coalescing nor bursting. On the surface a crust appeared, which seemed due to dried secretion; and, where this was subjected to friction, the surface became peculiarly papillated. Especially characteristic were the yellowish points described. An interesting fact was that the rash did not make its appearance until four days after the drug had been given up,⁶⁵.

KALI CARBONICUM.

Authorities. 13, Cloquet, from Wibmer (Orfila), a young man took a spoonful in the morning; 14, Andrew Derver, *Edin. Med. and Surg. Journ.*, vol. xxx, 1828, p. 310, a little boy drank about 3 ounces of a strong solution; 15, same, Mrs. —, who had been all day indulging freely in whiskey, drank a wineglass of a strong solution, and soon afterwards drank warm water; 16, W. T. Cox, M.D., *Lancet*, 1834–5 (2), p. 660, fatal poisoning of a child, æt. three years, by drinking Pearl ash that had become fluid; 17, C. H. Ralfé, M.D., *Lancet*, 1878 (2), p. 651, effects of the Bicarbonate on urine.

Mind.—Constant anxiety,¹³.

Face.—She looked haggard and exhausted (second day),¹⁵.

Mouth.—The gums became loosened and fell off in pieces,¹³—Mouth and fauces covered with a dirty-brown slough, which rendered the surface nearly insensible to touch (second day); the sloughs adhered firmly to the mouth and fauces (third day); the sloughs in the mouth began to separate, and burning heat in the fauces and gullet immediately supervened (fourth day); during the following week large portions of tough matter, sometimes firm and adherent like leather, were brought up by coughing, hawking, or vomiting; gradually the surface, so far as could be seen, became clean, though raw, and the burning and pain on swallowing were most distressing; after a month had elapsed the mouth and fauces began to assume a more healing appearance; the pain and difficulty of swallowing diminished,¹⁵.—[1700.] Tongue, gums, and fauces were shockingly destroyed, the cuticle appearing as if destroyed with a hot iron, while the inside of the

cheeks, roof of the mouth, and velum were entirely inflamed (after one hour),¹⁴.

Throat.—Every attempt to swallow gave great pain (after one hour),¹⁴.

Stomach.—Thirst very urgent (third day),¹⁵.—Hiccough and vomiting the whole day,¹³.—Nausea and vomiting, with the most violent pains in the stomach,¹³.—Inclination to vomit on pressing over epigastric region (second day),¹⁵.—Vomiting, almost immediately; increased after drinking warm water,¹⁵.—Vomited incessantly; the vinegar and water which he drank were instantly rejected (after one hour),¹⁴.—It was with the greatest difficulty that he could take any nourishment, since it always caused the most violent pain and frequently vomiting; the vomiting was not persistent, and only occurred after taking food or drink (after six weeks),¹³.—Burning pains, especially in the epigastric region, aggravated by pressure, for several weeks,¹³.—[1710.] Burning in the stomach, extending to the mouth, with a sensation of constriction,¹³.—Fluids had scarcely reached the stomach when they were followed by a sense of burning, and in general, in a few minutes, were rejected by vomiting (second day),¹⁵.—Acute pain at stomach, immediately,¹⁵.—On pressing over the epigastric region she complained of some uneasiness (second day),¹².

Abdomen.—Abdomen very sensitive to touch,¹⁴.

Stool.—Stools often purulent and at times bloody, for several weeks,¹³.—Profuse evacuation from the bowels and violent colic; the evacuations contained blackish portions of membranes and streaks of blood,¹³.

Urinary Organs.—Urine seldom and high-colored, for several weeks,¹³.—Took 1 drachm at 12 A.M. (one hour before dinner), and 1 drachm at 8 P.M. (one hour before supper).

	Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Day before,	1730	1.4	0.41
Day, with 2 drachms of Bicarb.,	2080	0.78	0.66
Day after,	1750	2.3	0.70

Second Observation.—Made at same hours:

	Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Day before,	1442	2.5	1.05
Day, with 2 drachms of Bicarb.,	1720	1.2	0.75
Day after,	1230	3.9	1.70

Third Observation.—Made at same hours:

	Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Day before,	2050	1.9	1.05
Day, with 2 drachms of Bicarb.,	2190	1.2	1.6
Day after,	1650	2.4	1.3

Fourth Observation.—Hourly variations. Made at same hours. Day before experiment:

	Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Water passed from 12 A.M. to 1 P.M., . . .	58	0.9	0.04
" " " 1 P.M. to 2 P.M., . . .	55	0.08	0.03
" " " 2 P.M. to 3 P.M., . . .	90	0.08	0.06
" " " 3 P.M. to 4 P.M., . . .	35	0.07	0.09
" " " 4 P.M. to 5 P.M., . . .	104	0.17	0.09
Total,	342	0.39	0.31

Day of experiment :

		Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Water passed from	12 A.M. to 1 P.M.,	72	Alkaline.	0.05
" " "	1 P.M. to 2 P.M.,	45	Alkaline.	0.04
" " "	2 P.M. to 3 P.M.,	40	0.05	0.08
" " "	3 P.M. to 4 P.M.,	70	0.09	0.08
" " "	4 P.M. to 5 P.M.,	90	0.09	0.07
Total,		317	0.23	0.32

Fifth Observation.—Same conditions. Day preceding experiment :

		Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Water passed from	12 A.M. to 1 P.M.,	34	0.046	0.04
" " "	1 P.M. to 2 P.M.,	43	0.094	0.06
" " "	2 P.M. to 3 P.M.,	41	0.096	0.03
" " "	3 P.M. to 4 P.M.,	50	0.065	0.04
" " "	4 P.M. to 5 P.M.,	60	0.075	0.03
Total,		228	0.376	0.20

Day of experiment :

Water passed from	12 A.M. to 1 P.M.,	82	Alkaline.	0.07
" " "	1 P.M. to 2 P.M.,	60	Alkaline.	0.06
" " "	2 P.M. to 3 P.M.,	98	0.11	0.04
" " "	3 P.M. to 4 P.M.,	150	0.13	0.05
" " "	4 P.M. to 5 P.M.,	310	0.11	0.07
Total,		700	0.35	0.29

Second series of observations to test effect when taken after meals.

Took 1 drachm at 2 P.M. (one hour after dinner), and 1 drachm at 9 P.M. (one hour after supper) :

	Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Day before,	1480	1.6	0.69
Day, with 2 drachms of Bicarb.,	1720	Neutral.	0.76
Day after,	2456	1.3	0.91

Second Observation.—Same conditions :

	Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Day before,	2600	2.4	1.04
Day, with 2 drachms of Bicarb.,	1900	Neutral.	0.95
Day after,	2300	1.3	1.15

Third Observation.—Same conditions :

	Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Day before,	1296	1.3	1.7
Day, with 2 drachms of Bicarb.,	2600	Alkaline.	2.1
Day after,	1480	1.7	1.8

Fourth Observation.—Same conditions, hourly observations. Day before experiment :

	Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Water passed from 1 P.M. to 2 P.M.,	53	0.06	0.12
" " " 2 P.M. to 3 P.M.,	55	0.15	0.12
" " " 3 P.M. to 4 P.M.,	41	0.11	0.11
" " " 4 P.M. to 5 P.M.,	30	0.04	0.07
" " " 5 P.M. to 6 P.M.,	61	0.02	0.12
Total,	270	0.38	0.54

Day of experiment:

Water passed from 1 P.M. to 2 P.M.,	47	0.11	0.06
" " " 2 P.M. to 3 P.M.,	83	Neutral.	0.06
" " " 3 P.M. to 4 P.M.,	103	Alkaline.	0.67
" " " 4 P.M. to 5 P.M.,	105	Alkaline.	0.03
" " " 5 P.M. to 6 P.M.,	110	Alkaline.	0.07
Total,	448		0.29

Fifth Observation.—One month later. Same conditions. Day before experiment:

	Quantity. Cubic cent.	Acidity. Grams.	Uric acid. Grams.
Water passed from 1 P.M. to 2 P.M.,	55	0.11	0.09
" " " 2 P.M. to 3 P.M.,	34	0.02	0.04
" " " 3 P.M. to 4 P.M.,	94	Alkaline.	0.10
" " " 4 P.M. to 5 P.M.,	50	0.02	0.08
" " " 5 P.M. to 6 P.M.,	306	0.08	0.06
Total,	539	0.25	0.37

Day of experiment:

Water passed from 1 P.M. to 2 P.M.,	15	0.05	0.04
" " " 2 P.M. to 3 P.M.,	92	Alkaline.	0.03
" " " 3 P.M. to 4 P.M.,	45	Alkaline.	0.09
" " " 4 P.M. to 5 P.M.,	65	Alkaline.	0.07
" " " 5 P.M. to 6 P.M.,	105	Alkaline.	0.06
Total,	322		0.29—17.

Pulse.—Pulse quick (second day),¹⁵.

Generalities.—[1720.] Great emaciation, with paleness, sunken eyes, dim vision, for six weeks,¹³.—Greatly agitated (second day),¹⁵.—Constant trembling and convulsive movements of the limbs,¹³.—Lips, tongue, and fauces swollen, soft, and red; breathing labored, and a rattling in the trachea and larger tubes; pulse quick and feeble, and the surface generally cold (in one hour and a half),¹⁶.

Sleep.—Little sleep for six weeks,¹³.—Almost always cold, and could be warmed only with the greatest difficulty, for several weeks,¹³.

Fever.—Fever on the next day, with general shivering, violent chill in the limbs,¹³.—Skin hot and dry (third day),¹⁵.—Cold sweat over the whole body,¹³.

KALI CHLORICUM.

Authorities. 28, Dr. J. Lewis Smith, Med. Record, vol. xiii, 1878, p. 397; 29, Dr. Hall, *ibid.*; (30 to 38, A. Jacobi, M.D., *ibid.*, vol. xv, p.

240, collection of cases); **30**, Seeligmüller reports fatal case of a boy, æt. six years; **31**, Lacombe, a man took 1 ounce instead of Sulphate of magnesia; **32**, Jacobi took single $\frac{1}{2}$ ounce and 6 drachm doses; **33**, Dr. Fountain experimented on himself, taking over 1 ounce; **34**, Dr. Krackowizer, a young lady was told to use a mouth-wash and gargle of 1 ounce, but she swallowed the whole; (35 to 38, Conrad Küster, *D. Zeit. f. prak. Med.*, 1877, No. 33); **35**, a woman, æt. twenty years, vigorous, for mild angina had a strong solution for gargling and internal use; **36**, a man, æt. thirty years, for trifling maculated diphtheritic angina, had a strong solution as a gargle, and took lime-water internally; **37**, a boy, æt. three years, for same disease, gargle and administration of the Chlorate; **38**, a girl, æt. four years, for mild angina, gargles and administration of the Chlorate.

[280.] Appears nearly well, both locally and generally, within two days; but in the afternoon very suddenly vomiting, yawning, apathy, bluish-white complexion, accelerated compressible pulse, skin cool. In the evening some urine, black, with greenish hue, albuminous, contained hæmatin. On the following days the color became more normal, and albumen less. On the fifth day the danger was over, but the pulse remained frequent a long time. No dropsy. A slight return of albumen on the sixteenth day,³⁸—The doctor found her dying at daybreak the following morning. Relatives said that vomiting and diarrhœa commenced in the evening, but that they all slept, and were awakened in the morning by the laborious breathing of the patient. The skin exhibited a peculiar dusky hue,³⁵.—Copious greenish discharges, obstinate vomiting, and collapse,³⁰.—A child, three or four years old, took $\mathfrak{z}\text{ij}$ within twenty-four hours. When he saw the child it was unable to pass any urine, except a few drops of bloody urine, its face was livid, and death occurred within the following day,²⁸.—An infant, under one year of age, took about $\mathfrak{z}\text{i}$ during a single night, with fatal result. There was suppression of the urine, and the face was livid,²⁹.—Some malaise all the time. Urine albuminous; the urine was peculiarly black on the third or fourth day. Urine albuminous a year and a half after,³⁶.—Urine black, a little greenish hue, moderately albuminous, the surface bluish white; the child dying. A good deal of vomiting,³⁷.—Heaviness and dragging in the lumbar region, and increased renal secretion,³².—He died in convulsions, after having purged very freely,³¹.—She died within three days of nephritis,³⁴.—[290.] Died within four days of nephritis,³³.

KALI CHROMICUM.

Authorities. **1**, Vjs. pract., Heilk (Am. Obs., vol. xv, p. 180), a woman, æt. twenty-five years took a piece about as large as a hazelnut; **2**, Maschka, *S. J.*, 178, p. 238, poisoning of a woman.

She soon suffered from abdominal pains, vomiting, bloody stools, and general debility. Six hours after the poison perfect collapse, followed by death a few hours later,¹.—Violent pain in the abdomen, aggravated by pressure,².—Bloody stool,².

KALI CYANATUM.

Authorities. **24**, E. Sandwell, *Lancet*, 1864 (2), p. 648, a child swallowed a drachm dissolved in water, after a full meal; **25**, Wm. Gillibrand, *Lancet*, 1876 (2), p. 223, a man, æt. thirty-five years, took between 50 and 60 grains; **26**, A. H. Newth, *M.D.*, *Med. Times and Gaz.*, 1877 (1), p. 335, poisoning

of a man ; 27, Geo. F. Souwers, M.D., Phil. Med. Times, vol. viii, 1877-8, p. 345, a photographer worked some days with it, both in substance and solution.

Mind.—Some muttering delirium (which afterwards became more active, the patient evincing a desire to walk around),²⁷.

Head.—[230.] Heaviness of head,²⁷.—Gnawing pain across temples,²⁵.—Soreness of the scalp over both parietal regions,²⁷.

Eye.—Eyes fixed, pupils dilated, and insensible to light,²⁵.—Swelling of the upper eyelids,²⁷.

Ear.—Ringing in the ears,²⁷.

Face.—Face dull, slightly flushed, and expressionless, the tendency being to close the eyes,²⁷.

Mouth.—Teeth, gums, and lips covered with sordes,².—Tongue has a peculiar darkish background, seen through the heavy white coating,²⁷.—Breath extremely fetid,²⁷.

Stomach.—[240.] Loss of appetite,²⁷.—Some nausea,²⁷.—Pain at the epigastrium, of a gripping intermitting character,²⁵.

Stool.—Bowels obstinately constipated,²⁷.

Respiratory Organs.—Breathing very slow and spasmodic, white froth issuing from the mouth, and the jaw fixed,²⁵.

Back.—Pain in lumbar region,²⁷.

Extremities.—Extremities relaxed and limbs flaccid,²⁵.

Generalities.—Immediately seized with convulsions, and soon became collapsed and rigid, the pulse at the wrist being imperceptible, though a slight action of the heart could be felt,²⁴.—Found the man lying full length in bed on his back ; the arms, which were straight down by his side, twitching convulsively ; hands partially clenched, thumbs flexed across palm ; body bathed in a clammy sweat ; face pallid, expressionless ; eyes fixed, partially closed, pupils widely dilated, tears in the corners of the eyelids ; breathing stertorous, loud mucous rattle, foam around mouth ; pulse imperceptible, and heart's action indistinct,²⁶.

Sleep.—Sleeplessness,²⁷.

Fever.—[250.] On awaking from *cat-naps* has a chill, which in fact wakes him before he can get soundly asleep ; this is followed by very slight sweat,²⁷.—Body covered with cold clammy sweat,²⁵.

KALI IODATUM.

Authorities. 59, Belgian Journal (Lancet, 1848 (2), p. 213), a man, æt. thirty-five years, took it for five months for acne indurata on the forehead, which it cured ; 60, Prof. A. Fournier, Med. Times and Gaz., Oct., 1877 (Amer. Journ. Med. Sci., Jan., 1878, p. 263), general effects ; 61, Dr. Colby, Pub. Mass. Hon. Med. Soc., vol. iv, 31, took one dose of 15 grains of Hydriodicum.

He suffered from a painful sensation of heat in his feet ; in a few days this increased, and was accompanied by a trembling of the limbs and feeling of intoxication ; his movements were uncertain from a tottering of his lower extremities ; there were vertigo, dulness of the eyes, feeble, and often double vision, with a sensation of turning round. All these phenomena persisted for several weeks. Shortly after, the power of moving his lips and cheeks was lost, and he was unable to masticate. He had also vague feelings in the head, back, and limbs, which he could not describe. A day

or two afterwards his gait was still faltering, with vertigo and feeble vision; the countenance was that of a drunkard; speech thick and indistinct; eyes apparently protruded, and a loss of appetite.⁵⁹—In a paper contributed to the *Revue Mensuelle de Méd. et de Chir.*, September, 1877, Prof. A. Fournier, of the St. Louis Hospital, observes that while among the numerous and various phenomena which may follow the ingestion of Iodide of potassium, there are some which are of common occurrence and well known; there are others which have either escaped attention, or have only been imperfectly described. Among these may be ranged, he believes, a cutaneous affection, consisting in the production of small miliary, non-pruriginous, sanguineous spots, proceeding after the manner of purpura, and to which he proposes to give the name of iodic purpura, or petechial iodism. That the appearance of the exanthem, and the taking of the Iodide are not a mere coincidence, he concludes from the following observations: 1. In all cases the purpura has appeared a very short time (from one to six days) after commencing the Iodide. 2. In some of the patients the same purpuric eruption has been produced several times after each new administration of the Iodide, and in three of these it occurred every time the medicine was used. Two cases are detailed in which this was the case three or four times. 3. In another case in which the purpura was produced on three successive occasions, it was found in all these that whenever the dose was notably increased, a marked aggravation or additional production of the eruption ensued.

As to the characteristics of this eruption, in all the patients the well-known appearances of purpura, and the impossibility of effacing them by pressure with the finger, were distinctly present, the petechial color due to extravasation being very obvious. The seat of the eruption, with one exception (when it was on the thorax, and that only), was in all the cases on the legs only, being always more confluent on their anterior than on their posterior part. It never descended to the foot, or extended beyond the knee. This purpura seems to assume an eminently discrete form, few spots being usually observed, about a hundred of these on each limb constituting the maximum of confluence, fifty or sixty, or even less, being the number usually observed. On the successive appearances the purpuric spots are even yet fewer in number. This rarity of confluence, and the especial localization of the exanthem about the anterior tibial region, impart to this variety of purpuric affection a somewhat peculiar physiognomy of its own. It is always a miliary purpura, that is, a petechial eruption of the smallest extent, resembling in size a millet-seed, the head of a pin, or at most, and that rarely, a grain of corn, or a small lentil. The spots are usually of a regular rounded form, and less often oval or irregular in form, and notched. The eruption never advances beyond this petechial and miliary condition. The spots are quite level with the skin, seemingly incorporated with the integument, the appearance of which they only modify by their bright color. Like as in purpura vulgaris, these spots give rise to neither local nor constitutional disturbance, inducing neither heat, pain, nor pruritus. Thus there is a great chance of this eruption passing unperceived, and it is always by accident that the patients have observed its existence, while undressing at the bath, etc., so that many cases have no doubt escaped the notice of patients and their attendants. The eruption comes on at an early period of the iodic treatment, and has completed its course in two or three days, at the end of which period it ceases to increase in confluence, even when the use of the medicine is continued. It remains for a certain time in the

condition of purpurine petechiæ, after which the spots undergo the ordinary changes of color observed in cutaneous hæmorrhages, finally disappearing at the end of two or three weeks. When under the influence of a large dose of the Iodide, a new purpuric outbreak is produced; the intruding eruption is easily distinguished from that which has preceded it by the bright purpurine color of its spots, contrasting with the faded condition of the prior spots. It has a curious appearance, this intermixture in the same locality of petechiæ of different ages, with difference of color corresponding to the periods of their appearance.

This purpura is certainly a rare accident, or rather phenomenon, for there are few remedies which are more employed than the Iodide of potassium; and if iodidic purpura were not almost an exceptional occurrence, it must have attracted the attention of observers. Professor Fourmier, who, during the few years since he first became aware of its existence, has carefully sought for it, has not met with more than some fifteen cases.

All the subjects of the affection hitherto met with enjoyed either a flourishing or a medium condition of health; and although some of them seemed affected with a certain degree of "lymphatism," none could be said to suffer from anemia or scrofula, and none had presented anterior hæmorrhagic proclivities. Any of these who were the subjects of syphilis exhibited only benign or medium forms of this, two-thirds of the cases being exempt from any specific manifestation of this disease at the time when the Iodide, *which, in fact, was administered only as a preventive*, produced the purpuric eruption. Further, in a negative point of view, neither sex, age, occupation, nor external temperature seemed to have exerted any influence. Nor can the eruption be attributed to excess of dose, since most of these patients had not taken more than 15 grains of the Iodide when the eruption had manifested itself. Still, quantity is not a matter of indifference, for when a given dose has been followed by purpura, a kind of tolerance of the remedy seems to be established, and no further manifestation ensues. But let the dose be much increased, doubled, for example, and a new outbreak of purpura may be immediately produced, although this is less confluent and less important than that which preceded it. But it is probably the *individual predisposition* which predominates over all the etiology, for however unknown and impenetrable in their nature, the existence of idiosyncrasies in regard to the action of certain remedies and articles of diet is beyond doubt. Iodidic purpura in its nature takes its place in the group of affections termed by M. Bazin, *provoquées indirectes* or *pathogénétiques*. It is a medicinal eruption which ranges nosologically with the roseola from Copaiba, the erythema from Belladonna, the exanthems from Arsenic, the acne from Iodine, etc.⁶⁰.—At night, after retiring, had a terrible spasmodic pain at the root of the tongue, extending to both sides of the throat. For about fifteen or twenty minutes the pain was excruciating, causing a fear that death was impending. There was a sensation as if a spasm would close the pharynx.⁶¹

KALI NITRICUM.

Authorities. 51, William Alexander, M.D., *Experimental Essays*, London, 1770, p. 104, experiments on himself; 52, N. G., A. H. Z., 3, p. 145, a woman took a spoonful; 53, Mouton, S. J., 158, 242, a man took 4 grams in wine; 54, Richard Wood, *Brit. Med. Journ.*, 1877 (2), p. 521, a woman

took about 2 ounces; 55, J. A. Thompson, *ibid.*, 1878 (1), p. 402, a man ate some soup to which had been added jelly made from a liquor in which a pig's face had been boiled.

Mind.—[1120.] Mild delirium, followed by great restlessness, wakefulness, and death.⁵³—She thought she would die.⁵²—Complete unconsciousness.⁵³

Head.—Reeling so she cannot stand.⁵²

Eye.—Eyes staring, immovable, the pupils dilated.⁵³

Mouth.—Crawling on the tongue.⁵²

Stomach.—Nausea, retching, and vomiting of mucus and water, then bloody mucus.⁵²—In three hours nausea and griping set in; these continued to increase to the eleventh hour, when some whiskey and nutmeg which had been taken was vomited. At the twelfth hour, violent watery purging in large quantity set in and continued for an hour, and the pain ceased. On the morning of the third day he felt a good deal of lumbar aching, which he attributed to the confinement. At midday he took 2 ounces of Hollands in cold water; an hour after he passed water, which was coffee-colored from admixture of blood.⁵³—Burning in the stomach.⁵²

Urinary Organs.—Urine diminished.⁵²

Pulse.—[1130.] Pulse small, rapid.⁵²—Pulse irregular, scarcely perceptible.⁵³

Extremities.—Crawling in the hands and feet, as if asleep.⁵²

Generalities.—Complained of great burning pain in the stomach, and in about five minutes vomited some glairy fluid. Some slight shivering and tremulous motion of the hands occurred, with an unsteady attempt at walking. Pulse quick and feeble.⁵⁴

Experiment 1.—I applied a thermometer to the pit of my stomach, and the highest degree to which the mercury would rise was 98; I then took a drachm of Nitre dissolved in an ounce of water; two minutes after this my pulsations were reduced from 72 to 64; four minutes after they were as low as 62, and from that time they began gradually to increase, till at the end of ten minutes they were at 70 and soon after at 72, the exact number at which they were before I took the draught; about twenty minutes after I had taken the Nitre, on looking at the thermometer, the mercury had risen from 98° to 99½°, and in twenty minutes more it was fallen again to 98°, and my pulse still continued to beat 72; this was exactly, in every respect, the state in which I was before I took it.

As the rising and falling of the mercury in all the subsequent trials was extremely irregular, I shall leave out of my narrative of the following experiments the observations I made on it, and lay it down as a postulatam, that *whatever power Nitre may have of cooling the body, it does not exert it in any perceptible manner on its external parts.*

Experiment 2.—About an hour after I had taken the first draught, I took a second. My pulse beat 70 before I took it, but in one minute after no more than 60, though it soon became quicker, so as at the end of ten minutes to beat 68, and in a few minutes more 70. As soon as I had taken it I felt a chilliness all over my body, but more particularly at my stomach, which continued for about twenty minutes to give me a good deal of uneasiness. It then began to decrease, and in little more than half an hour was entirely gone off.

Experiment 3.—The next day I repeated the same experiment. Before I took the dose my pulse beat 64; the second minute after the strokes were reduced to 60; the fifth minute after they were 63, and soon came to 64, as before I took it.

Experiment 4.—The day following I took a drachm dissolved in 2 ounces of water. Before I took it my pulse beat 73; the second minute after it fell to 66; the fourth minute after it rose to 69; and from that time became still more frequent, till at the end of nine minutes it had recovered its usual strength and was at 73.

Experiment 5.—Twenty minutes after this dose I took a drachm and a half of Nitre, dissolved in 3 ounces of water: after two minutes my pulse was weak, fluttering, and unequal, and beat about 70 in a minute; soon after I felt a painful sensation at the upper orifice of my stomach, and on arising from my chair, it was with some difficulty that I walked through the room; I then returned to the chair and felt my pulse again; it was now become so quick, fluttering, and irregular, and my head was so giddy, that I could not exactly number the strokes it beat, though, as near as I could judge, they were between 96 and 100; in about an hour every one of these disagreeable symptoms began to abate, and continued slowly decreasing all that day; the next morning when I got out of bed they were entirely gone off.

Experiment 6.—I dissolved $1\frac{1}{2}$ drachms in 3 ounces of water, which I left twelve hours exposed to the air, and then swallowed; immediately before I took it my pulse beat 64; the second minute after it beat the same; the fourth minute after it beat 59; and from that time began to increase as in the former experiments, till it came to the standard at which it had been before I took the Nitre.

Experiment 7.—I dissolved 6 drachms in a quart of water, which I began to drink early in the morning, and by taking small draughts of it as often as I had convenience. I finished the whole at 8 o'clock that night without feeling any uneasiness from it, or being sensible of its having operated any other way than by urine.

Experiment 8.—Two days after I dissolved 1 ounce of Nitre in the same quantity of water, and drank it in the same time; it gave me no uneasiness, nor had any sensible effects.

Experiment 9.—Some days after this I dissolved $1\frac{1}{2}$ ounces of Nitre in 3 pounds of water, and took a draught of it every hour, except in bed; the whole was drank in twenty-four hours; after four or five draughts I felt a slight chilliness at my stomach every time I took it; but this generally went off before the time of taking the next draught, and on that account gave me but little pain.

Experiment 10.—I now resolved to try what would be the effect of the same quantity of Nitre, when every different dose was taken immediately on its being dissolved; for this purpose I divided 1 ounce of it into eight equal parts, and took one of these parts, dissolved in 4 ounces of water, every ninety minutes. The weather was at this time very warm, and,

therefore, the first three or four doses cooled and refreshed me; the fifth and sixth, however, gave me a chilliness and pain in my stomach; the seventh and eighth increased these sharp stinging pains, not only in my stomach, but through my whole body, which were so violent that for fifteen minutes after each dose I could not breathe without feeling a very acute pain on every inspiration.

Experiment 11.—As I had been able to take $1\frac{1}{2}$ ounces of Nitre with very little inconvenience when it had been long dissolved, I resolved to make one more effort to try if I could manage the same quantity, when every dose was taken immediately after being dissolved. I therefore prepared eight powders of $1\frac{1}{2}$ drachms each, with a design to take one of them every ninety minutes, as in the last experiment; the second dose gave me a chilliness at my stomach; the third gave me some of the above-mentioned pains; and the fourth increased them to such a violent degree that I was obliged to desist from taking any more.⁵¹

Fever.—Skin cold, cyanotic, covered with cold, clammy sweat,⁵³.—Excessive coldness, with redness of the face,⁵².

KALI SULFURICUM.

Authority. 6, Dr. Bonnassies, Gaz. des Hop., Dec. 1843 (Pharm. Journ., vol. iii, p. 259), a woman took 600 grains in three doses.

The first dose was rejected by the stomach; the second dose brought on sickness, vomiting, purging, and cramps; on taking the third dose all the symptoms of cholera were manifested, and the patient died.

KEROSENUM.

Authority. H. Allen, M.D., Am. Journ. of Med. Sci., 1862 (1), p. 92, effects on a workman in a kerosene oil manufactory.

The eruption first presented itself upon the hands and forearms; but at the time of his admittance it had extended to the chest, back, and inner surfaces of the thighs and legs, the face and scalp being entirely free. It commenced by the appearance of a number of small papules of a reddish color which, in the course of one or two days, became marked phlyzacious pustules. Each of them bore upon its summit a black spot closely resembling the discolored surface of sebaceous secretion. The pustule in about the same time as was required for its maturation desquamated, and left behind a small deep pock somewhat resembling that which succeeds the small-pox pustule, but much less significant. The time ensuing from the appearance of the papule to the formation of the pock varied, but most generally five days were sufficient for the completion. In a comparatively few instances the process of maturation appeared checked, and the papule would change to pock without any pus having made its appearance. Occasionally one of the pustules, after having desquamated, would again go through the same conditions before the skin would resume its natural color and sensation. The eruption was most plentiful upon the anterior and posterior parts of the chest, where the papules, pustules, black spots, and minute depressions were all intermingled. The pain was very trifling; a sensation of soreness was complained of, which became worse at night when the patient was warm in bed.

KOUSSO.

Authorities. **2**, M. Chomel, Ann. de Therap. (quoted by Pereira, in Pharm. Journ., vol. x, 1851, p. 23), effects when used for tapeworm; **3**, Johnston's Travels in Southern Abyssinia (ibid., vol. ii, 1844, p. 272); **4**, Dr. Courbon, Pharm. Journ., Second Series, vol. iii, 1832, p. 20, effects of flowers reduced to powder, taken fasting, for tænia.

The whole of the remedy was rejected by vomiting.²—It soon produces nausea, accompanied with great acridity. An hour after taking the medicine, the patient has an ordinary solid stool; an hour or an hour and a half later a liquid stool; and at the end of three hours, or sometimes from four to six hours, the *tænia solium* is expelled in the form of a whitish ball or knot.⁴—The operation is speedy and effectual; and to judge by the prostration of strength it occasioned in my servants when they employed this medicine, it must be dreadfully severe. I can answer for this, that it occasions frequent miscarriages, often fatal to the mother, and even men have been known, after a large dose, to have died the same day from its consequences.³

KREOSOTUM.

Authority. **16**, J. D. Jeffrey, Assoc. Med. Journ., 1853 (2), p. 929, a woman swallowed a piece of lint saturated with Kreosote.

Insensible; countenance pale; frothing at the mouth; pupils dilated; giddiness, everything looked of a dark blue; dreadful burning at chest; vomiting; pain at front of head; numb feeling all over,¹⁶.

LABURNUM.

Authorities. **28**, Dr. Fischer, Zeit. Pract. Heilk., 1867, p. 408, two boys ate the twigs; **29**, Bull, from the Swedish (S. J., 176, 221), a boy was poisoned by the green twigs; **30**, Dr. Peale, Berlin Klin. Woch., April, 1877, two children, aged three and four years, ate the green pods; **31**, Brit. Med. Journ., 1877 (2), p. 403, poisoning of fifty-eight boys by the root of an old tree.

Seized with vomiting, pain in the stomach, and collapse. There was no diarrhœa, but tenesmus and erections. After a few hours he passed 300 grains of clear grass-green urine, after which he felt better. The urine soon after passing assumed a natural color,²⁹.—After half an hour the youngest child staggered, rolled his head from side to side, closed his eyes. The face was very pale, the lips blue, face and extremities cold. The mother gave the child coffee, after which he vomited and fell asleep. The elder fell sick after half an hour, complained of pain in the head and abdomen, weariness, was unable to walk. After going home he vomited four times, and then fell asleep. After some hours the children were very pale, with very cold skin; small, scarcely perceptible pulse. The next morning they had several movements of the bowels, and felt weak, but otherwise were well.²⁸.—[150.] Suddenly attacked with pains in the abdomen and vomiting. They lay with the head sunken upon the chest, with half-closed lids, extremities hanging down relaxed, without any trace of muscular contraction. Skin of the face cold and livid; lips open, mucous

membrane dryer than usual; pupils decidedly dilated; mind very much stupefied, especially in the younger, who could scarcely be aroused for a moment by shaking or calling. Pulse of the elder 52, of the younger 55, very small and irregular. Temperature below the normal, in the elder 36.8° , in the younger 36.6° , in the axilla. Respiration superficial. Hands and extremities bluish, like the face, and remarkably cool. Sensibility of the skin diminished. The younger vomited spontaneously several times the remains of the dinner, and afterwards mucus colored with bile, with slightly acid reaction; the elder had only ineffectual retching, and complained incessantly of pains in the epigastric region. After a dose of 1 gram of Ipecac. profuse vomiting occurred. Large doses of port wine were given at intervals of five minutes; the extremities were wrapped in warm cloths and the head in cold compresses, and sleep prevented by shaking and calling, and also by smelling salts; in consequence of this exciting treatment, the younger soon became better; the sopor diminished gradually, the pulse became fuller and more rapid, and the other symptoms disappeared after a quiet sleep, accompanied by copious perspiration. The elder's recovery was not quite so satisfactory; after vomiting, the symptoms of collapse decidedly increased; she complained of more pain than before, and only after an hour did the pulse become perceptible, and remained slow for many hours.³⁰—In a very short time they were affected with symptoms of narcotic poisoning, varying in severity from simple sleepiness to complete stupor. Two boys were much worse than the rest; they, after freely vomiting, were insensible, and showed very strange waving motions of the arms to and fro; whilst now and then the legs, first one, then the other, were convulsively drawn up; there was also in one of the two, slight frothing of the mouth, and the pupils of each were *unequally dilated*,³¹.

LACERTA.

Authority. 5, Sidney B. Cushman, Bost. Med. and Surg. Journ., vol. xxi, 1840, p. 367, a girl, aged thirteen years, was bitten on the sole of the left foot by a large green spotted lizard.

Numbness of the foot, as though it had been deprived of sensation by cording the ankle, and that occasional prickling that occurs on the return of circulation; numbness continued spreading upward; the whole limb became severely swollen, with most excruciating pain on the slightest motion. Inflammatory blush over the direction of the lymphatics (second day). The muscles of the neck and jaw of that side were rigid and tender to touch. Much difficulty in swallowing. Occasional delirium, particularly the first week. Wonderfully increased mental acumen during her intervals of reason. Whole left side paralyzed. The limbs were spotted a short time before death, which occurred on the twenty-first day.⁵

LACTUCA.

Authority. 43, Dr. Fischer, in Rust's Mag., Lond. Med. Gaz., 1839–40, vol. i, p. 862 (Am. Obs., 1876, p. 80), general effects.

It quiets without previously exciting, and produces sleep without insensibility, lessens the action of the heart, and produces a general tranquillity throughout the whole constitution. In large doses it causes delirium with-

out stimulating, diminution of nervous power, disturbance of the digestive functions without vomiting,⁴³.

LAPPA.

Lappa officinalis, Allioni.

Natural order, Compositæ.

Common name, Burdock.

Authority. Jacob Jeanes, M.D., Hahn. Month., vol. iv, 1868, p. 151, I took, about 11 A.M., 2 or 3 drops of 2d cent. dil. in 1 ounce of water.

1. *Immediately*. Tickling in the rima glottis, with loose-sounding cough, but no expectoration.
2. Pain about the sixth and seventh ribs, on the left side.
3. Chilliness. Pain in the lower extremities, as if fatigued.
4. Severe tingling pain, with acute cutting pain, under the sternum, about on a line with the insertions of the fourth and fifth ribs, and extending across the breast.
5. Oppression of breath, specially in the sternal region, with shortness of breath on exertion.

Wishing to take a drink of water before retiring to bed, I took the tumbler out of which I had taken my dose in the forenoon, and allowed a strong stream of water to flow into it, shaking the glass strongly during this flow and overflow, to aid in the process of rinsing. I then drew and drank one or two tumblers of water. I had not taken it a minute before I was affected in the following manner:

6. The symptoms of pain across the breast, mentioned above, in 4 and 5, but to these is added aching of the throat and violent constrictive feeling; pain in the head; extremely rapid pulse, with frequent intermissions (about every second or third pulsation); pain in the head, in the region of veneration, and pain in the region of the heart, with an indescribable movement in the chest, under the sternum, on a line with the third ribs. At the same time pain in the anterior muscles of the right thigh.

7. Pains in the back about the eighth dorsal vertebræ.

8. The pulse becomes fuller and slower, but seldom more than three pulsations without any intermission.

9. Bowels opened two or three times, as if purged, with some abatement in the violence of the symptoms.

10. The mind much agitated from the distressing feelings more than from the fear of death, which, however, appears to be threatened.

11. The symptoms continued violent and distressing through the greater part of the night.

At the date of this occurrence I was about forty-five years of age, had never had an attack of this kind, and had never noticed any intermission of the pulsations of my heart. My pulse had been, for many years, and still continues to be, abnormally frequent, 84 in the minute. Within a few years I have had two or three attacks of febrile disorder, in which the pulse for some hours was exceedingly feeble, frequent, and irregular, but entirely different in character from the intermittent pulse I had after taking the *Arctium lappa*.

LAUROCERASUS.

Authorities. **41**, Lond. Med. Gaz., Encyclop. des Sci. Med., Sept., 1842 (Amer. Journ. of Med. Sci., Second Series, vol. vi, p. 499), a child, aged about eight months, was given $\frac{1}{2}$ teaspoonful of a potion of which cherry-laurel water was the principal constituent; **42**, Mr. Semple, Pharm. Journ., vol. ii, 1842-3, p. 31, Sir Theodosius Boughton, was poisoned; **43**, Dr. Hayn, Hufeland's Journ., 1843 (Woodman and Tidy's Forensic Medicine and Toxicology, p. 423), fatal poisoning of an old man, by $1\frac{1}{2}$ ounces of cherry-laurel water; **44**, Med. Times, May, 1845, p. 123 (ibid.), a girl, aged five years, swallowed the kernels of some stones of the sweet cherry, and died in forty hours; **45**, Lancet, 1868 (1), p. 30, at Toulon, three children, aged four to five years, ate the kernels of peach-stones.

Intense coma; eyes closed; pupils dilated; respiration hurried; urine and feces involuntarily discharged; convulsions.⁴¹—Hands and feet became paralyzed, but did not lose sensation (after three hours); at length the respiratory muscles became affected, and he then died.⁴³—Very severe convulsions; one died in less than an hour, the two others, who had, perhaps, partaken less freely of the poisonous substance, recovered, thanks to very active and persevering therapeutical measures.⁴⁵—Eyes fixed upwards, his teeth clenched, and froth running from his mouth (after about a quarter of an hour), and he died in about half an hour.⁴²—[1090.] She had scarcely taken the mixture when she shrieked, threw her head back, and was convulsed; death ensued in ten minutes.⁴¹

LILIUM SUPERBUM.

Natural order. Liliaceæ.

Authority. Edward Reading, Inaug. Thesis, presented to Hom. Med. Coll. of Penn., 1853, copied from MSS.

The root was prepared for use by reducing the fresh article to a pulpy mass and macerating in twice its weight of alcohol; many of the symptoms were obtained from the attenuations.

Great difficulty in fixing the mind on any subject. Gloomy state of the mind, with indifference, worse in the morning. Anxiety after retiring to rest, with fear of losing one's reason. Very much fatigued by mental exertion; entirely disqualified for his usual business.

Dull, heavy, pressing pain in the head, with uneasiness and general lassitude. Fulness and pressing pain in the forehead, worse when moving and in the open air; this symptom commenced in some cases a few moments, in other several hours after taking the medicine, and continued in every case with short intervals during the proving. Severe drawing pain in the left anterior part of the head, extending to the left temple, when lying down, also stitches in the temple. Pain extending from the top of the head to the left scapula. Violent throbbing pains in the head. Pain in a small spot on the top of the head. Pain in the right occipital protuberance. Frontal headache, with shooting pain down the nose. Heat in the head, with throbbing of the arteries. Heat and stupefaction of the head. Sensation, as though the brain were loose and falling from side to side or forward, when stooping.

Violent pain immediately over the eyes. The eyes feel cold in the open air, and have lost their brightness and vivacity, and appear expressionless.

Shooting pain, extending from below upward into the ears, continuing for several weeks. Burning of the ears, with pain in the left ear.

Pain extending from the head to the nose. Bleeding of the nose, preceded by dull heavy feeling in the head. Bleeding of the nose at short intervals the whole day.

The face has a sickly appearance, with eyes surrounded by blue margins. Burning heat of the face and head, with chilliness of the rest of the body. Heat of the face, in the evening, more on the left side.

Pain in the articulations of the lower jaw. Pain in a hollow molar, with great sensitiveness to cold things.

Bitter taste in the mouth. The root first tastes sweet, afterwards bitter. White coating of the tongue.

Scraping and smarting pains in the pharynx. Sticking pain with dryness in the pharynx, causing him to swallow almost constantly. Burning and soreness in the pharynx. Burning through the whole length of the œsophagus, caused by eructations of a burning fluid. Tenacious mucus in the throat. Redness of the fauces.

Increased appetite during the proving. Nausea, with rising of an acrid burning fluid. Pain in the pit of the stomach. Feeling of malaise in the epigastric region. Frequent empty eructations. Pain at the cardiac orifice of the stomach. Violent cutting pains in the stomach increased by pressure. Pain in the scrobiculus cordis.

Constrictive feeling in the right and left hypochondriac regions as though a band were passed around the body. Constant pain in the right hypochondrium, made worse by exercise or by a deep inspiration. Stitches in the lower part of the liver. Constant sticking pain in the region of the spleen, more when lying on the left side. Dull pain in the region of the spleen. Pain in the left hypochondriac region, shooting to the back when lying down. Pain in the right, afterwards in the left side, just below the ribs. The pains in the region of the spleen commenced a short time after taking the medicine and continued for several days. Uneasiness and restlessness in the abdomen, feeling as though diarrhœa were coming on. Unpleasant sensation in the abdomen, with rumbling of flatus. Smarting pain all over the bowels. Pain in the umbilical region.

Constipation the first few days; afterwards tendency to diarrhœa. Constant sensation as though diarrhœa were about setting in. Discharge of yellowish-green diarrhœic stools with considerable tenesmus. Yellow papescent stool. Pain in the rectum while at stool.

Urine very much increased in quantity.

Sexual desire very much diminished.

Shooting pains through the left side of the chest. Oppressive pain in the chest. Severe lancinating pain in the right axilla. Aching pain in the left side of the chest at night. Violent pain in the left side, in the region of the heart. Constrictive pain in the chest, as if too small.

Pulse much accelerated.

Pain in the lumbar region. Pain in the scapular region. A sensation of chilliness, with a feeling of lameness or weakness in the back.

Stiffness in the extremities. Pain and uneasy sensation in the extremities. Stitches in the right shoulder. Almost intolerable shooting pain through the shoulder in the direction of the tendon of the biceps. Aching pain in the right wrist. Stitches along the inner side of the right thigh. Pain in both legs below the knees. Aching in the bones of the lower extremities. Great weakness of the extremities.

A feeling of languor over the whole body, with great weakness of the limbs. General debility, with great disposition to sweat. Dull languid feeling immediately after taking the medicine, with aversion to any kind of labor. Great prostration of strength. In two cases where the provers became alarmed by the violence of the symptoms Aconite and Bryonia afforded prompt relief. Weariness and yawning.

Great restlessness during the night. Drowsiness, great inclination to sleep without the ability to do so. He slept well till 2 A.M., afterwards was restless; tossing about, could not lie long in any position. Extreme restlessness at night, troubled by horrid dreams. Dreams of robbers, thinks they are going to injure him and endeavors to call for help. Dreams of having seen an acquaintance dangerously stabbed. Frightful dreams; he imagines that the upper part of his head is torn away, and that some one is trying to cut him to pieces with a knife.

Heat of the head and face; coldness of the rest of the body, with aching of the bones, in the evening, followed by general heat after going to bed; pulse quick; this terminates in profuse sweat towards morning. Coldness of the hands and feet, even in a warm room. Heat of the head, more on the left side, with violent throbbing in the head during exercise. Sweats easily during sleep and motion. Flushes of heat over the body followed by sweat.

LINUM.

Linum usitatissimum.

Authority. L. P. Loret, *Gaz. des Hôp.*, Sept. 1861, effects of two spoonfuls of linseed oil.

Miss X., aged nineteen years, of *nervo-sanguine* temperament, had always enjoyed excellent health.

January 21st, at about 11 P.M., I was sent for in great haste, and found her laboring under peculiar nervous symptoms, for which I was unable to account. She lay on her back; the face red and slightly moist; the head shaking spasmodically in measured time; the rigid and prominent temporal muscles jerking rapidly. The jaws were immovably clenched; the upper limbs shaken by spasms, but pliable and uncontracted. With all this nervous disturbance, there was no sign of cerebral disorder; the patient was perfectly conscious, and complained by signs of violent pain in the cheeks and temples. She could not articulate a syllable. She had never before, so her mother assured me, been troubled with her nerves. She had been very cheerful all that day, and had been working in the evening in a small room well heated by a pan of coals. About 8 o'clock, after taking a cup of cold milk, she fell asleep, but woke up in a few minutes, saying that her tongue was drawn down into her throat, and complaining also of a great weight in the stomach and severe colic.

She went to bed, but soon became speechless, and fell into convulsions.

I at once rejected the idea apparently entertained by her mother, that she had been poisoned by carbonic oxide gas, her symptoms bearing but a slight resemblance to those caused by that agent. The clearness of the intellect, the absence of frothing at the mouth, and the undistorted features, putting epilepsy out of the question, I began to think the attack must be hysterical. Yet the symptoms did not seem to wear the precise aspect of

hysteria, and some of the leading features in that disease were absent. Here were violent trismus, and complete paralysis of the tongue, affections of rare occurrence in hysterical patients, although I was aware that the former had been noticed in some well-authenticated cases. Besides, there was neither globus hystericus, meteorism of stomach or bowels, nor any of those perversions of cutaneous sensibility so frequently accompanying the malady in question. Nevertheless, I decided on the employment of anti-spasmodics; and, as the patient was utterly unable to swallow, at once ordered the injection of 4 grams of *Asafoetida*. At the same time I rubbed the temples with a strong opiate liniment, and a large linseed plaster was applied to the abdomen. The injection was followed in ten minutes by decided relief; the patient began to sob violently; and in a few minutes more, passed a large quantity of pale limpid urine; after which she lay down again, much tranquillized. I soon succeeded in prying open the jaws with the handle of a fork, when I was surprised to see that the tip of the tongue was turned upwards and backwards, so as to touch the velum palati. On attempting to speak, the patient uttered only inarticulate sounds. I then got her to swallow a few spoonfuls of sweetened orange-flower water. This was very comforting; and her jaws could now be opened spontaneously. I then left her; recommending blisters on the thighs for a violent headache of which she complained. On visiting her, next morning, I was informed that shortly after I had gone, the symptoms had returned with great violence, especially the trismus, and that she had suffered the most intense pain for about an hour. At about 5 p.m. all was right again, and the patient had recovered her speech. Of last night's symptoms, there now only remained general prostration, with a bruised feeling in the elbow and knee-joints, heavy frontal headache, and a dull pain in the cheeks and temples. The patient then gave me the following account of the origin of her troubles. On the preceding night, wishing a drink of milk, she went, without a light, into an adjoining room, and took up a cup she knew to be half full of that article. To this she added two spoonfuls from another cup standing near, which she supposed also contained milk. In drinking, she felt something go down which was sour and greasy, and was not mixed with the rest of the draught; yet not suspecting anything wrong she swallowed the entire cupful. Almost immediately she felt a fullness of the stomach and a precordial uneasiness, and soon went to bed, where she was seized with spasms. She had no idea of the cause of her symptoms until a short time before my second visit, which accounts for her answering in the negative when I requested her to tell me by signs if she had taken anything injurious.

I prescribed copious draughts of milk; to keep on the linseed plasters; and injections of a decoction of Iron. Next day she was quite well. She told me that the evening before she had vomited, with copious stools; and she thought her stomach had thrown off the oil. Since then her health has been imperfect.

LITHIUM MURIATICUM.

Authority. C. Hering, M.D., *Hom. Vjs.*, vol. xiv, 1863, p. 97.

Diluted Muriatic acid was saturated with the caustic and Carbonate of lithium and evaporated.

In the morning a drop was placed upon the tongue. It had a salt taste,

but different from common salt. The upper surface of the tongue became numb, as if fat were on it. After three to five minutes, a throbbing pain in the left humerus, extending upward from the middle, at different intervals, as if something were dropping or slipping outward. Painful dulness in the right side of the head, though not sharply defined, also in the upper part of the left side, with heat of the face, worse in the upper part and right side. Painful dulness in the left lower back teeth. Unusual weariness after exerting the arms; burning in the arms. The fatty-salt taste lasted more than half an hour. After an hour, throbbing pain in the right ankle.

After two hours and a half, pain in the heart, in the upper and inner part. The same taste in the mouth. Frequent heat in the face. (C. Hering.)

Dr. Gohrwisch took $\frac{1}{4}$ drop of Lithium muriate, 3d, with sugar of milk. After about two hours he had several slight sensations, for example, feeling of warmth in the pit of the stomach, more towards the left side; pain in the middle of the vertex; pain in the forehead above the right eye; prickling in the anus; dull pain through the whole head; frequent eructations of gas. Uprising of something acid and stinging in the throat, frequently; feeling as after a purge, as though diarrhœa would ensue; dull pressive pain between the shoulders, and lower down, on each side of the spine, between the shoulders and small of the back; constant pain in the back. Hot, burning uprising in the throat and pit of the stomach, like heartburn. Pain in the lower hollow teeth of the left side.

On the second day, in the morning, feeling of heat and weakness in the stomach, as after a purge. Pain in the back is only felt on remaining seated in one position for a long time.

On the third day spasmodic twitching of the right upper lid. Difficult breathing through the nose, as in catarrh. Uprisings of food and sour water. An aching between the shoulders extending through to the chest. Sharp but not violent pain in the lower portion of the left side of the chest, transient, but frequently recurring.

The same day, in the afternoon, dull pain in the same back teeth, at the same time as yesterday. Tip of the nose red, sore, and somewhat swollen, with a rather sensitive pain; this, however, disappeared on the second day without suppurating.

R., the same man who proved Lithium carb. with such effect, took Lithium mur. 2d in solution, without noticing anything except increased appetite.

LOBELINUM.

Alkaloid of *Lobelia inflata*.

Authority. Isaac Ott, M.D., Chicago Journ. of Nervous and Mental Diseases, vol. xi, 1877, p. 68, took 1–192 m. of Acetate of lobelina, at 2.25, 2.56, and 3.10 P.M.

Head.—Headache (in one hundred and six minutes).

Eye.—Pupils dilated (in seventeen minutes).

Throat.—Tickling and dryness in the throat (in two minutes).

Stomach.—Retching (after third dose).—Vomiting (after third dose).—Uncomfortable feeling in the stomach (in seventeen minutes).

Respiratory Organs.—Respiration 17 (before experiment); 19 (in two minutes); 17 (in seven and thirteen minutes); 18 (in seventeen

minutes); 17 (in twenty-two minutes); 18 (in thirty minutes); 19 (in thirty-eight minutes); 18 (in forty-two and forty-seven minutes); 20 (in fifty-four minutes); 18 (in sixty-one minutes); 19 (in seventy-eight minutes); 18 (in ninety-two minutes).

Heart and Pulse.—Pulse 74 (before experiment); 73 (in two minutes); 70 (in seven minutes); 69 (in thirteen minutes); 68 (in seventeen and twenty-two minutes); 72 (in thirty minutes); 74 (in thirty-eight minutes); 76 (in forty-two minutes); 77 (in forty-seven minutes); 72 (in fifty-four minutes); 70 (in sixty-one minutes); 65 (in seventy-eight minutes); 68 (in ninety-two minutes).

Generalities.—Prostration (in one hundred and six minutes).

Sleep.—Disposition to sleep (in one hundred and six minutes).

Fever.—[10.] Temperature by mouth 99° (before experiment); 99° (in two and seven minutes); $99\frac{1}{2}^{\circ}$ (in seven, thirteen, seventeen, and twenty-two minutes); $99\frac{1}{4}^{\circ}$ (thirty to fifty-four minutes); 99° (in sixty-one minutes); $99\frac{1}{4}^{\circ}$ (in seventy-eight and ninety-two minutes).

LUFFA.

Dried fruit of a Brazilian plant called Cabacinha.

Authority. (Dr. Scott Alison, Pharm. Journ., vol. iv, 1845, Berridge's Collection, New Eng. Med. Gaz., 1876, p. 303). 1, a man, aged thirty years, took $\frac{1}{2}$ grain extract; 2, a woman, took 40 drops tincture.

Within one-quarter of an hour he was overcome with faintness and nausea. He swallowed a little warm water, and immediately vomited freely. No violent action of the bowels followed, but for some days afterwards the stools were more than usually copious.¹—She had nausea for two days and retched a little.²

LYCOPodium.

Authority. 46, Dr. Sommer, A. H. Z., 24, p. 370, effects of 3d trit.

Stitches in the left side of the pit of the stomach, apparently externally. In talking, all the words of a sentence were spoken completely and distinctly except the last, which were stammered; it seemed as though the tongue were affected by a peculiar cramp; no amount of attention to this was of any avail; it lasted four weeks, and gradually disappeared of itself.⁴⁶

MANGANUM SULFURICUM.

Authority. Alexander Ure, Med. Gaz. (Pharm. Journ., vol. iv, 1844–5, p. 285), effects of a drachm dissolved in half a pint of water, and drank before breakfast.

One or more liquid stools (after one hour or so).

MELILOTUS.

Authorities. 8, A. M. Cushing, New Eng. Med. Gaz., vol. xi, 1876, p. 407, effects of 1st and 2d dil., when given for headache; 9, G. W. Bowen, U. S. Med. Invest., New Series, 8, 1878, p. 156, at 6 P.M., took 10 drops of 1st cent. dil. of tincture of root; 10, same, effects of cut flowers in a room.

Head.—Frequent headache, with but little pain,⁸.—At 9 P.M., after a hard day's work accomplished by an effort, I had a horrible oppressive headache, felt dizzy, faint, and nauseated (second day),⁹.—The odor gave some of the people a terribly oppressive headache,¹⁰.

Face.—Very red face in the afternoon (second day),⁹.

Stomach.—Acrid and burning eructations all the evening (first day),⁹.

Abdomen.—Before I got to sleep, my abdomen became considerably bloated, with a crawling sensation as of worms, near the rectal muscles (second night),⁹.

Urinary Organs.—Was obliged to void water very frequently (fourth day),⁹.

Chest.—Before 10 P.M., had a severe pain apparently in right lung, with occasionally a pain in left hip, with twitching or jactitation of the muscles (second day),⁹.—[40.] Awoke after sleeping badly, with a great deal of soreness in my chest internally, with an oppression as of a great weight. Through the day I had much difficulty in breathing, and every respiration was labored, with a continued fulness of the chest and head (third day). Awoke with a spasmodic cough, and yet with the same oppression and spasmodic breathing and fulness of the chest. Repeatedly examined my clothing to see if it did not oppress me; feared that I had taken cold and would have pneumonia. Was extremely nervous, and during the day the severe, oppressive, heavy, and throbbing headache returned, so much so, I feared some of the bloodvessels would give way and some lesion of the brain would occur. Was easiest when perfectly quiet. Towards night was sure I had internal hæmorrhage from the severe congestion and fulness (fourth day). Had a horribly distressing cough, which gave me a great deal of anxiety. Very easily wearied, with inability to get air enough; the head was better. Towards night a slight expectoration took place, which gave me some little relief, but it was detached with great difficulty. Was obliged to give up business, go home, and all night had hot cloths applied to my chest to give relief. Was delirious part of the night, and talked almost constantly (fifth day). The next day was unable to attend to my business, but finally recovered in a few days,⁹.

Generalities.—Felt oppressed, heavy, and tired, in the morning (second day),⁹.

Sleep.—Felt sleepy and dull, in the afternoon (second day),⁹.

MENTHA PIPERITA.

Authority. 2, P. C. Remondino, M.D., Med. and Surg. Reporter, vol. xiv, 1866, p. 278, a boy, aged six years, took between 1 and 2 ounces of the essence, and died in two hours.

Insensible (after five minutes). Motionless; limbs relaxed; slow, full pulse; stertorous breathing; cold skin; livid lips; immovable pupils; eyes fixed (in twenty minutes),².

MERCURIUS.

Authorities. 84, Dr. Goolden, Lancet, 1853 (2), p. 231, effects on a silverer; 85, H. J. Franks, *ibid.*, p. 317, same; 86, Dr. H. Jackson, Med. Times and Gaz., 1877 (1), p. 641, effects on a man employed in amalga-

mating zinc plates with Mercury; 87, T. Pratt, M.D., Hahn. Month., vol. xiii, 1878, p. 472, prescribed a powder of $3\frac{1}{10}$ th trit., every three hours, for a severe cold in the head, in the second stage.

After he had taken the fourth powder I was summoned to see him, when he informed me that the catarrhal symptoms were much improved, but he was then having a most violent facial neuralgia on the right side, originating in the dental nerve, and radiating upwards over the side of the face. This he first felt after taking the second dose, and immediately after each of the two last the aggravation was marked and intense, so much so, that he felt that he could not take another dose. I discontinued the remedy and the difficulty soon subsided.⁸⁷—His teeth, which are carious, are becoming loose; there is a white line, from undue epithelial secretions, at the margin of the gums; there are great tremors approaching to paralysis, and an indecision in speaking, resembling stammering. He has lost two stone weight during the last two years. The tongue is wavy from nervous debility, and he suffers from nocturnal perspirations; memory is rather failing, and appetite is bad.⁸⁸—Pale, weak, and anxious-looking, with a slow but regular pulse; tongue furred; teeth mostly greenish black and carious; skin generally dry and cold. He could not walk at all, hardly speak, and when he attempted to move, or was asked a question, his whole frame was thrown into the most immoderate convulsive actions.⁸¹—Old-looking for his age; thin and pale; sallow, but not to an extreme degree. Has slight blue line along lower gums. Teeth, lower incisors, pegged, flattened at the top, the centre brown, the enamel everywhere deficient. All of them chipped and decayed. Mental condition defective. He cannot give a history of his illness. To every question about it, answer only, "Mercury." When pressed about it, says, "Too much is expected of him," and he begins to sob and cry. Cries with the least excitement. He cannot remember his age to within ten years. Speech very thick; the words are drawled out, but he often fails to complete them. After he has been talking a little time, articulation becomes less and less distinct, apparently from defective control over the muscles. Tremors; when he is not talking the face is tranquil, but directly he begins to speak all the face muscles become tremulous. When told to open his mouth he gets marked tremor of muscles of mastication. Tongue very tremulous when protruded; no nystagmus. Coarse tremor of whole right upper limb elicited on movement. Lower limbs: Able to walk a mile fairly well, but no more. No trembling of legs when he stands or walks. Staggeres when eyes are closed; would fall unless prevented. When sitting in a chair, and told to raise the right leg off the ground, there is coarse tremor in the whole limb.⁸⁶

MERCURIUS CORROSIVUS.

Authorities. 87, W. B. Herapath, M.D., *Lancet*, 1845 (2), p. 650, an epileptic woman swallowed a scruple of the bichloride in solution; 88, M. Wade, *ibid.*, 1848 (1), p. 500, fatal poisoning of Mr. M., æt. twenty-one years, by rather more than a drachm; 89, H. Gatch Carey, M.D., *Med. and Surg. Reporter*, vol. ix, 1856, p. 209, Mr. S., æt. twenty-three years, swallowed about 170 grains dissolved in Spirits of nitre, and died in thirty-six hours; 90, John G. Bingham, M.D., *Amer. Med. Times*, vol. iv, 1862, p. 347, a child, æt. eighteen months, swallowed an unknown quantity, and died in twenty minutes; 91, G. S. Galer, M.D., *Philad. Med. and Surg.*

Reporter, vol. xxvi, 1872, p. 248, Mrs. S., æt. forty years, took over 1 fluid ounce from a bottle containing pure alcohol, with more of the substance than it could hold in solution; **92**, Q. C. Smith, M.D., Pacific Med. and Surg. Journ., Feb., 1875, p. 448, Mrs. W., æt. sixty-seven years, took about a tablespoonful of the strength usually prepared to kill vermin, and died after twenty-three days; **93**, C. A. Libby, M.D., U. S. Med. Invest., New Ser., vol. vi, 1877, p. 72, a boy, æt. three years, swallowed an unknown quantity; **94**, R. T. Gore, Lancet, 1878 (1), p. 146, a woman injected some into her vagina; **95**, Maschka, S. J., 178, 238, a girl drank a large quantity; **96**, D. G. Woodvine, M.D., Pub. Mass. Hom. Soc., vol. iv, p. 149, a woman, æt. twenty-two years, took a fatal dose; **97**, Chas. T. Southworth, M.D., New Orleans Med. and Surg. Journ., vol. xvi, 1859, p. 675, Mrs. S., æt. sixty-three years, was occupied fifteen minutes in anointing with an alcoholic solution of the perchloride a bedstead infected with bugs.

Mind.—Inexpressible anxiety,⁹⁷.—Indecent exposure of person; threw off the bedclothes, and attempted to walk about the room, when she was not able. She had, previous to taking the drug, been modest and retiring; now she seems to have no regard for herself. She cared not who was present when she desired to use the vessel, and threw off her clothing, as if no one were in the room; was cross and petulant,⁹⁶.—[**1130.**] Coma (eighth day),⁸⁷.

Head.—Dull frontal headache was noticed first on the fourth day after taking the drug, and continued the same on alternate days, until the tenth day. On the tenth day the headache was continuous. She said the pain commenced down in the throat, and extended up through the Eustachian tubes to the frontal region. Fifteenth day, frontal headache,⁹⁶.

Eye.—Eyes protruding,⁹⁰.

Face.—Features pallid (after five hours and a half),⁸⁹.—Face flushed,^{90,97}.—Countenance pinched, anxious, and of a bluish-white hue (after half an hour),⁹¹.—First day, face dry and hot. Second day, face bloated. Fourth to seventh day, face much swollen and very red. Eighth day, much less edema in face. Ninth day, face pale and slightly swollen. Tenth day, face swollen more. Twelfth day, face much swollen and red. Sixteenth day, face pale and features sunken,⁹⁶.

Mouth and Throat.—Sloughing of the gums, lips, and tongue (fifth day),⁸⁷.—Swelling of the gums and salivary glands, with profuse ptyalism,⁹⁴.—Tongue was frequently thrust out,⁹⁰.—[**1140.**] Breath had a gangrenous odor (twenty-first day),⁹².—Dark blood and brickdust-colored froth almost constantly dribbled from the mouth for several days before her death,⁹².—A white streak extended from the angle of the mouth to the lower edge of the jaw on one side, and the dorsum of the tongue and throat were also corroded,⁹⁰.—The mucous membrane of the mouth and pharynx was destroyed, and blood slowly oozed from these surfaces, which were extremely tender,⁹².—The vitality of every part of the mucous membrane with which the caustic solution came in contact appeared to be destroyed,⁸⁹.—Violent burning pain in the mouth, throat, œsophagus, and stomach,⁹⁷.—Styptic, acid, metallic taste (after half an hour),⁹¹.—Ptyalism (third day),⁸⁷.—Saliva copiously flowing from her mouth (after half an hour),⁹¹.—Ptyalism and swelling extending over the mucous membrane of the mouth, the inner surface of the cheeks, and the tongue, palate, and throat (second day),⁹⁷.—[**1150.**] Third day, complains of very sore throat. It is swollen and much ulcerated. Inside of the cheeks and border of the gums much ulcerated. The ulcers are of a grayish color. Breath very

offensive, so that it is very difficult to make a thorough examination. Fourth day, dry patch on end of tongue, the remaining portion being coated white. Fifth day, the throat feels better. Sixth day, throat feels sore, but not so difficult to swallow. Eighth day, throat sore, with pain on swallowing, extending up the Eustachian tubes. Mouth the same. Bloody mucus from the posterior nares. On the ninth day difficulty of deglutition much increased. Eleventh day, slight salivation, snapping noise in the throat when almost asleep, which wakens her. Twelfth day, no improvement. Thirteenth day, almost impossible to swallow; the throat is filled with glairy, sticky mucus, the ulcers appear much the same. Fifteenth day, sordes on the teeth, tongue dry, breath offensive. Sixteenth and seventeenth days, the same.⁹⁶—Burning and constriction of the throat (after half an hour),⁹¹.—Intense pain in throat and stomach (after a short time),⁹².—Difficulty of deglutition,⁹⁷.—Deglutition and expectoration difficult and painful,⁹².

Stomach.—Much thirst,⁹⁷.—Constant nausea (after five hours and a half),⁸⁹.—During the latter stages, nausea and tenesmus were almost constant, the fluids consisting wholly or in part of blood,⁸⁹.—Severe retching, and the head was thrown back, and tossed from side to side,⁹⁰.—Violent retchings, with great pain (after a short time),⁹².—[1160.] Vomiting (in two minutes),⁸⁷.—Violent vomiting of mucus and bilious matter,⁹⁷.—First day, violent retching and vomiting of food and dark-looking matter, followed by yellow bile. Second day, vomited a great quantity of bile in the early part of the day; sensation of lump and pain in the pylorus; constant desire for cold water, which is very repulsive, and almost immediately vomited. Third day, constant nausea, with occasional vomiting of bile. The sensation of pain and lump in pylorus gone; thirst for hot or cold drinks, but nothing tastes natural, on account of a brassy taste in the mouth. Fourth day, no nausea. Fifth day, stomach sensitive to pressure; thirst for cold water in large quantity. Sixth day, much the same. Seventh day, swelling and pain in the pylorus, and hiccough. Eighth day, the sensation of pain and swelling in the pylorus gone; vomited once; great tenderness over the stomach and bowels. Ninth day, great flatulence after taking milk; the stomach very sensitive to the slightest pressure. Eleventh day, much the same. Twelfth day, anything liquid or solid produces distress and pain. Fourteenth day, cannot take anything into the stomach. She remained thus until death, on the seventeenth day,⁹⁶.—Spontaneous vomiting supervened almost instantly,⁸⁹.—After the first hour, the fluids thrown up consisted of those taken to abate the thirst, which was not immoderate, mingled with blood (after five hours and a half),⁸⁹.—After oil and milk were taken, she vomited and passed bloody matter from the bowels; and these symptoms, accompanied with pain, continued with greater or less severity until death,⁹².—Vomiting occurred in a few minutes, the fluid ejected consisting of a white froth, with a considerable quantity of blood. Complained of much pain in the region of the stomach. Countenance pale and anxious; surface of body generally cold, especially the extremities; pulse scarcely to be distinguished; tongue dry,⁸⁸.—Constant pain along the whole length of the alimentary tract (twenty-first day),⁹².—Burning, griping, and tearing pains of the stomach, accompanied by deathly nausea, but by no vomiting (after half an hour),⁹¹.

Abdomen and Stool.—First day, sharp pain, with rumbling in the bowels and profuse bilious discharges. Second day, a great many bilious and slimy stools during the twenty-four hours. Third day, frequent slimy

bilious stools in the morning early, with tenesmus; no stool in the afternoon; bowels are a little sensitive to the touch, and are very flat. Fourth day, no stool. Fifth day, three bilious, slimy stools in the early part of the day; bowels sensitive to pressure. Sixth day, diarrhoea continues, but is growing less. Seventh day, a good many dark-brown and slimy stools day and night, which continued until the thirteenth day, when it was less frequent, until the fifteenth day, when two hæmorrhages of the bowels occurred within fifteen minutes of each other, after which the discharges were involuntary until death,⁹⁶.—[1170.] Constant disposition to evacuate the rectum and bladder (after five hours and a half),⁸⁹.—Diarrhoea (first and second day),⁸⁷.—Violent purging,⁹⁷.—Dysentery and tenesmus (fifth day),⁸⁷.—The frequent small, bloody, alvine discharges emitted an intensely putrid odor, so offensive that the attendants could scarcely remain in the room (twenty-first day),⁹².—About forty minutes after taking the poison, the patient passed a natural motion from the bowels, which was followed by a considerable quantity of fluid blood,⁸⁹.

Urinary Organs.—Urine suppressed (third day),⁸⁷.—Three half pints of urine and blood were evacuated, the latter fluid predominating (after about forty-five minutes),⁸⁹.—Second day, a very small quantity of urine was passed, after which there was complete suppression of the urine for five days. Eighth day, a good deal of acute pain in the region of the kidneys; passes a small quantity of urine. Specific gravity 1013; reaction acid; looks as if a few drops of milk were stirred in the urine. The common tests of heat and nitric acid show an albuminous deposit. Squamous epithelium in the deposit on the eighth day. Ninth day, has passed no urine for twelve hours, and suffered much acute pain in the kidneys. Tenth day, urinates more freely than for several days. Specific gravity 1010. Examination of the sediment under the microscope reveals what appears like a granular cast, urine still albuminous. Fifteenth day, until death, involuntary discharge of urine; great tenderness to pressure in the region of the kidneys,⁹⁶.

Sexual Organs.—Intense pain in the vagina and abdomen, with a copious discharge of thin watery mucus,⁹¹.—[1180.] Menses reappear for a day or two, she having just completed her regular menstrual period at the time the drug was taken. On the thirteenth day the menses reappear slightly,⁹⁶.

Respiratory Organs.—Second day, loose rattling cough, with almost complete aphonia; raises a good deal of grayish-looking and salty-tasting phlegm. Fourth day, loose rattling cough. Sixth day, voice improving. Eleventh day, cough loose and rattling. Fifteenth day, breathing short. Sixteenth day, sighing respiration,⁹⁶.—Short and laborious respiration (after half an hour),⁹⁷.—Great dyspnoea (after five hours and a half),⁸⁹.—Respiration embarrassed (ninth day),⁸⁷.—Respiration irregular and sighing (twenty-first day),⁹².

Chest.—Chest often violently expanded,⁹⁰.—Congestion of the lungs (ninth day),⁸⁷.

Pulse.—The pulse was small, weak, and beating 60 to the minute (after half an hour),⁹¹.—Pulse quick, small, and contracted,⁹⁷.—[1190.] Pulse 120, very weak and irregular (twenty-first day),⁹².—Pulse at the wrist perceptible only occasionally (after five hours and a half),⁸⁹.

Extremities.—Myalgia of the thighs; coldness of hands and feet on the ninth day. Sixteenth day, lies with feet drawn up,⁹⁶.

Generalities.—Jactitation and trembling (eighth day),⁸⁷.—Convul-

sions (eighth day),⁸⁷.—I found him in the sixth convulsion, fearfully distressed, and every part of the patient was drawn up, his feet, legs, arms, and hands were closely contracted, the hands being so clasped that it was impossible for me to open one finger; face flushed a bright scarlet, cheeks and forehead hot; but around his mouth it was marble white, and under his eyes it had a purple shade; pupils dilated; eyes rolled up so that you could only see the pupils by pressing the lid up as far as possible. He remained in this condition about five minutes. After remedies he vomited fresh blood, perhaps half a teaspoonful each time, mixed with the egg. After six hours the pulse was 160, face flushed, tongue dry, with a very red streak in the centre, and very thirsty. About 12 o'clock that night blood began passing the bowels, and shreds of membrane, with great tenesmus. In the morning the stomach and bowels were sore to pressure,⁹³.—She fell to the ground in a faint, became collapsed, insensible, with a very small pulse,⁹⁵.—First day, unconscious; pulseless at the wrist; constant restlessness and tossing about. Second day, fully conscious, but spoke with difficulty; pulse 120; myalgia. Third day, continued restlessness; pulse 120. Fourth day, pulse 100. Sixth day, pulse 80. Seventh day, pulse 88. Eighth day, pulse 88, refuses to talk. Ninth day, pulse 100. Tenth day, myalgia. Eleventh day, pulse 96. Twelfth day, pulse 100; myalgia. Thirteenth day, pulse 88. Fourteenth day, pulse 100. Sixteenth day, pulse not countable; is not inclined to talk; great debility and emaciation. Seventeenth day, had a fainting spell; heart stopped for a few seconds, her eyes half closed, and died on the seventeenth day after taking the poison,⁹⁶.—Restless (after five hours and a half),⁸⁹.—In a state of almost hopeless collapse (after five hours and a half),⁸⁹.—[1200.] Prostration (ninth day),⁸⁷.—Extremely prostrated (twenty-first day),⁹²⁹⁷.—Great prostration and violent pain (fifth day),⁸⁷.

Skin.—First day, the skin had a very dry, harsh feeling to the hand. Second day, great coolness of the surface all over the body. Third day, skin warm all over, but hottest on the face. Fourth day, high fever. Sixth day, great itching of the skin, which looks dry and shrivelled. This itching, with variations in the temperature, continued until death,⁹⁶.

Sleep.—First and second days, scarce any sleep day or night. Third day, slept a little during the daytime. Fourth day, slept better. For the next seven days she had short naps and unpleasant dreams. Fourteenth day, had very restless nights for the last three nights. Seventeenth day, sleeps with eyes half closed,⁹⁶.

Fever.—The whole surface was cold, and bathed in a profuse clammy sweat (after half an hour),⁹¹.—Skin, even when dry, felt cool to the touch (twenty-first day),⁹².—Artificial heat was required to keep her feet and limbs warm,⁹².—Surface and extremities cool (after five hours and a half),⁸⁹.—Begged for cold water often to drink, and to be poured on her body and head, and expressed partial, temporary relief when her body was sponged with cold water; saying without water, she was burning up, inside and out (twenty-first day),⁹².—[1210.] Febrile excitement in the evening (sixth day); continued (seventh day),⁸⁷.—Cold sweats,⁹⁷.

MERCURIUS PRECIPITATUS ALBUS.

Authority. 4, Pharm. Journ., 2d Ser., vol. i, 1859–60, p. 532, Harriet Moore murdered her child with 20 grains.

Immediately after some arrowroot the child was violently sick, and during the night shrieked as though in great pain. On the following morning he was found to have undergone a remarkable change, and in the language of one of the witnesses, had become quite an "old man,"⁴.

MERCURIUS PRÆCIPITATUS RUBER.

Authority. 15, F. S. Smyth, Brit. Med. Journ., 1878 (2), p. 101, poisoning of a woman æt. twenty years.

Lying upon the bed in a state of stupor, with a weak, irregular, scarcely perceptible pulse; pupils dilated, but sensible to light; the surface of the body cold and clammy to the touch, and a copious discharge running from the mouth. Had vomited, and her bowels were very loose, and she complained of great pain across the abdomen. Later she complained of cramps in the lower limbs, and severe pain in the abdomen,¹⁵.

MEZEREUM.

Authorities. 53, Lesser Writings of Hahnemann (Dr. Adolph Gerstel, North Am. Journ. of Hom., New Ser., 9, 1878, p. 184); 54, Pluskal, Oest. Woch., 1844 (ibid.), effects of leaves; 55, Dr. Schwebe, Caspar's Woch. (Lancet, 1849 (2), p. 637), two children, æt. four and two years, ate some berries; 56, J. B. Carruthers, M.D., Lancet, 1859 (2), p. 378, a child, æt. three years, ate the berries.

Somebody advised a young, pale girl, æt. fourteen years, to use the leaves of Mezereum in order to become fat and rosy. She went into the woods and made free use of them on her cheeks and surrounding parts. Burning pains soon appeared, her whole face swelled up enormously, especially the nose, eyelids, and hairy scalp. Severe and painful sneezing, deliria, dull, unbearable, pressing pains in the forehead, a nauseous dryness in the throat, and a constant irritation to dry cough, showed that the acidity of the poison by its inhalation affected the nose, and through the frontal sinuses the cerebral membranes, also pharynx and larynx. The face soon took on the expression of erysipelas bullosum, the nostrils closed, so that she could only breathe through her mouth; febrile pulse, burning urine. After external application of oil, cold compresses, and indifferent external remedies, the swelling decreased after the second day, and desquamated in large pieces. But health did not return. Debility, loss of vitality, and mental depression, bordering on idiocy, were since that time observed in her. A typhoid fever, lasting full three months, prostrated her so much that she finally succumbed to it,⁵⁴.—Dryness and burning of the throat, with attempts to vomit; intense thirst; great heat of skin; great prostration of strength; pale countenance; and a feeble quick pulse,⁵⁶.—The eldest complained of a burning sensation in the mouth and nausea; dryness of the throat and burning at the pit of the stomach; a reddish mucus was discharged from the mouth. In an hour both were plunged into complete narcotism, with coma, convulsive movements of the eyes and the superior extremities, dilatation and insensibility of the pupils,⁵⁵.—[1570.] A robust person took some bark of Mezereum for some ailment, and continuing the drug after the disappearance of his troubles, he soon complained of unbearable itching all over the body, so that he could not sleep one moment.

Even after leaving it off for thirty-six hours, he assured me that the itching still kept on increasing. A few grains of Camphor removed this itching.⁶³

MONOTROPA.

Monotropa uniflora, L.

Natural order, Ericaceae.

Common name, Indian Pipe.

Authority. A. H. Y., Lafayette, Ind., Botanical Gazette, vol. iii, 1876, p. 37.

A young lady while examining the plant accidentally crushed the stem, and some of the juice was driven upon her lips. The mucous portions, which were somewhat chapped, became very much irritated, and began to inflame and swell considerably, while in two or three places upon the epidermal skin of the lip, small ulcerous sores were formed. The effect remained some four or five days, and then gradually healed. The whole appearance was very much like a mild case of poisoning with *Rhus tox*.

MORPHINUM.

Authorities. **74**, Le Clinique (Lond. Med. Gaz., vol. iii, 1829, p. 851), Mr. G. took 24 grains of the Acetate dissolved in 1 ounce distilled water; **75**, M. Martin-Solon, Bull. de l'Acad. Roy. de Med., 1836, and Brit. and For. Med. Rev. (Am. Journ. of Med. Sci., 22, 1838, p. 202), effects of dipping the point of a lancet in an aqueous solution and inserting beneath the epidermis; **76**, same, effects of the Muriate experienced by Dr. Lafargue, from thirteen punctures on the front of the forearm; **77**, Blanchard Fosgate, M.D., Amer. Journ. of Med. Sci., New Ser., 1, 1841, p. 112, for toothache took 1 ounce of a solution containing $1\frac{1}{2}$ grains of the Sulphate, after taking no food nor drink for eighteen hours; **78**, omitted; **79**, Lond. Med. Gaz. (Bost. Med. and Surg. Journ., vol. xxxiii, 1845, p. 128), a young woman, for scirrhus of uterus, vomiting, and pain in the stomach, applied to the epigastrium, from which the skin had been removed by a blister, $\frac{1}{2}$ grain of the Muriate; the same was repeated the next morning; **80**, Chas. Foulke, M.D., Amer. Journ. Med. Sci., New Ser., 15, 1848, p. 568, Mrs. R., æt. sixteen years, eight months pregnant, for labor-pains, took $11\frac{1}{2}$ grains of the Sulphate in three hours; **81**, C. S. S., Bost. Med. and Surg. Journ., 63, 1860, p. 325, a young man made habitual use of Morphine, generally taking one-fifth of a bottleful (1-8 ounces) in water; **82**, J. S. L., *ibid.*, p. 391, Mrs. A. H. S., æt. forty-two years, had taken Morphine for years; when first seen she was taking from 4 to 6 drachms per week; **83**, B. Woodward, M.D., *ibid.*, vol. lxxv, p. 157, I took $\frac{1}{3}$ grain of the Sulphate at 7, 10, 1, and 4 o'clock. I repeated this experiment four times, at intervals of five days, with same effects; afterwards subjected five young men to same experiment, and with four obtained a very large increase and lower specific gravity of the urine; with one of them, on two trials, I found no perceptible increase or diminution of, but a marked lessening of, specific gravity; I did not obtain same results from Opium itself, but there was no difference whether the Muriate or Sulphate

† From inoculation of all common preparations of Opium he saw the same effects, except that the papillæ sometimes acquired a diameter of an inch and a half, and then became radiated and diffuse.

were used ; **84**, Wm. Norris, M.D., Amer. Journ. Med. Sci., New Ser., 44, 1862, p. 395, a person, æt. nineteen years, took 75 grains of Sulphate in water ; **85**, Medical Circular, June 10th, 1863 (Brit. Journ. of Hom., 22, 348), effects of solution of Mor. mur., taken in the usual doses, but too frequently, for cold in the chest ; **86**, Dr. J. L. Prentiss, Chicago Med. Journ., December, 1866 (Amer. Journ. of Med. Sci., New Ser., 53, p. 565), a woman was said to have taken 5 grains of Morphia ; **87**, J. R. Wiest, M.D., Cincin. Journ. of Med., May, 1867, p. 265, Mr. W., æt. fifty years, took an unknown number of pills, each containing $\frac{1}{6}$ grain of the Sulphate ; **88**, Benj. B. Wilson, M.D., Med. and Surg. Reporter, vol. xix, 1868, p. 369, a woman who had been receiving hypodermic injections of $\frac{1}{4}$ grain of the Sulphate, now received a somewhat larger one ; **89**, J. J. Lyons, M.D., New Orleans Med. and Sur. Journ., vol. xxii, 1869, p. 292, a girl, æt. five years, took 5 grains of Sulphate to prevent the return of an intermittent, from which she had been suffering the previous week ; **90**, John Sprott, M.D., *ibid.*, p. 506, for rheumatism, used daily for three years, from 2 to 4 grains of Sulphate ; **91**, C. H. Alden, Philad. Med. Times, vol. i, 1871, p. 295, L. R. took by enema between 12 and 15 grains of Sulphate, dissolved in 2 fluid ounces of water ; **92**, W. W. Grisson, M.D., St. Louis Med. and Surg. Journ., 1872, p. 353, a woman, æt. thirty-one years, took 6 grains of Morphine ; **93**, Geo. Bayles, M.D., Virginia Med. Rec., 1875, p. 188, Mr. S., for pleuritis of the right side, took within three hours and a half 50 minims of Squibb's solution of Morphia ; **94**, Dr. A. P. Hull, Philad. Med. Times, September, 1876, p. 581, a child, æt. six weeks, took $\frac{1}{2}$ grain of Sulphate ; **95**, E. H. Coover, Philad. Med. and Surg. Reporter, vol. xxxvi, 1877, p. 452, John H., æt. thirty years, for an abscess on the left parotid, took 2 powders, containing probably $2\frac{1}{2}$ grains of Sulphate, at an interval of twelve hours ; **96**, S. B. Chase, *ibid.*, vol. xxxiv, p. 37, a man, æt. thirty-five years, took 6 or 7 grains of Morphia.

Mind.—I found her, as she had been for some hours, crazy, with three or four holding her in bed ; during the intervals of slight convulsions she was in this crazy condition.⁸⁰—Subsequent to the commencement of the nausea, and previous to the exhibition of a gill of cold strong coffee, my mind was depressed, and considerable anxiety pervaded it, but it was at the same time restrained to a consideration of the condition of my system, and no pleasurable sensations had been experienced. The coffee, however, soon raised this weight of oppression, and, I may add, also the controlling power of reason, and in their stead, fancy in her wildest range roved on through scenes of rapture and splendor, which the mind of the patient, unassisted by such powerful influences, is utterly incapable of attaining. This delightful revelling of the imagination continued five or six hours, and during this interval my attendants, who spoke to me several times, could not determine whether I was asleep or not ; neither can I settle the question myself, for, if asleep, I awoke so easily that the transition could not be perceived. But I am conscious that this state of mental delirium ended in a sound sleep, which was succeeded by a few hours of lassitude.⁷⁷—So nervous that the least movement in the room would make her spring from the bed,⁸²—Sometimes talking in a partially incoherent, excited manner (after three hours),⁸¹—Incoherency in speech for three weeks,⁷⁹—[680.] Mind much confused, but when persistently addressed, her attention was aroused, and she replied, though rather incoherently (after three hours) ; mind quite clear (fourth day),⁸¹—Lost his recollection (after six or seven minutes),⁷⁴—Stupor,⁷⁹—Stupor was fast approaching, but was not complete,

occasionally she would wake and fret (after three hours),⁸⁹.—Complete insensibility,^{80, 86}, etc.—Comatose, although by persistent shaking and loud talking, he could be roused for a brief period.⁸⁷

Head.—Dizziness.⁷⁹.—Slowly rolling her head (after three hours),⁹¹.—Pain in the head,⁷⁹.—Head felt very heavy (after three hours),⁹¹.—[690.] Heaviness of the head,⁷⁶.

Eye.—Eyes sunken in the head,⁸².—Eyelids half closed; conjunctivæ injected, pupils contracted to mere points; irides immovable (after three hours); pupils natural size or nearly so, and the irides movable (fourth day),⁹¹.—Pupil contracted (after three hours),⁸⁶, etc.—Pupils contracted to a pin's point,⁸⁴, etc.—Pupils contracted to a little more than a pin's point,⁸⁶.—Contracted pupil and complete insensibility,⁸⁸.—Great contraction of the pupils, almost perfect blindness.⁸⁰.—Saw every object double and very indistinctly (after three hours),⁹¹.—She saw only one-half of surrounding objects; for instance, in the case of a person standing before her, she could see only the right or left half of the body; it was three weeks before vision was completely restored,⁷⁹.

Ear.—[700.] Ringing in the ears,⁷⁹.

Face.—Suffused and purple countenance,⁸⁸.—Complexion cyanotic,⁹³.—Countenance of a dark color,⁸⁴.—Face and lips livid,⁸⁰.—Constantly rubbing the nose, eyes, and face,⁸⁰.—Jaws rigid,⁸⁶.—Masseter muscles rigid (after six hours),⁸⁶.

Mouth.—Teeth firmly closed (after six hours),⁸⁶.—Tongue dry and cracked in places,⁸².—[710.] Clamminess of the mouth,⁷⁶.—The saliva of the mouth was being churned into a froth, which welled up and then disappeared at every return and subsidence of the respiratory movement,⁸¹.—Slow of speech, although if sharply questioned he would answer his name,⁸¹.—It was with great difficulty that she could talk so as to be understood,⁸².

Stomach.—Thirst,⁸⁴.—Great nausea and many efforts to vomit (after five hours),⁷⁷.—Vomited at intervals (after three hours),⁹¹.—Vomiting in the evening,⁸².—The pain in her stomach recurred every few minutes, and became at times very intense; she made loud cries, ground her teeth, and threw her arms about violently; she described the pain as like that of cramp (after six hours); the pain became gradually less, and was felt more in the region of the umbilicus (after nine hours),⁹¹.—It often produces a painful cramp of the stomach, and especially is it liable to do so in persons not in the habit of using it. This effect is readily relieved by a small quantity of some stimulant, brandy or spirits of camphor being the most effectual. One-eighth of a grain acts more powerfully on an empty stomach than half a grain after eating,⁹⁰.

Urinary Organs.—[720.] Pain across the kidneys, followed by diuresis,⁸¹.—Vesical tenesmus, but was unable to pass urine; about 8 or 10 fluid ounces removed by the catheter (after three hours); urine removed twice, about 12 fluid ounces each time (second day); passed urine naturally (third day),⁹¹.—It acts almost invariably as a diuretic in from one to two hours,⁹⁰.—Passed 28 ounces of urine, with specific gravity of 1014, in twenty-four hours (before the experiment); measured all the urine passed at 9 P.M., and found it to be 48 ounces, very limpid, specific gravity 1003 (the day of the experiment),⁸³.

Respiratory Organs.—When taken in a full dose it changes the voice, producing a temporary hoarseness,⁹⁰.—Respiration hurried,⁸².—Breathing not more than once in forty-six seconds (after five hours and a half),⁸⁰.—The child breathed about once in fifty seconds for seven hours,⁸⁰.

—Respiration stertorous, 10 to the minute,⁸⁷.—Stertorous breathing,⁸⁴.—[730.] Stertorous breathing was strongly marked, in fact, the patient ceased to breathe, the interval being lengthened out one-fourth of a minute or nearly so,⁸⁸.—Breathing was stertorous, irregular, and very slow, not more than two respirations in a minute,⁸³.—Respiration stertorous and feeble, so much so that he breathed but four times a minute (five hours after second dose),⁸⁵.—Breathing stertorous; at times arrested for a minute (after six hours),⁸⁶.—Breathing peculiar to the last stage of Opium poisoning,⁸⁶.—Respiration suspended,⁹².

Heart and Pulse.—Circulation full but slow,⁷⁷.—Strong and frequent pulse,⁷⁹.—Pulse 130 and feeble,⁹².—Pulse 120 and of moderate strength,⁸⁷.—[740.] Pulse 110,⁸².—Pulse 80, moderately full (after six hours),⁸⁶.—Pulse 80 and soft,⁸⁴.—Pulse full and slightly excited (after three hours),⁸⁹.—Pulse 60 (after three hours),⁹¹.—Pulse feeble and irregular (five hours after second dose),⁹⁵.—A slow, laboring pulse,⁸⁴.—The pulse was intermittent, and so weak as to be almost imperceptible at the wrists, and there was a fluttering movement observable on both sides of the neck,⁹³.—Pulseless,⁹⁶.

Inferior Extremities.—Gait staggering,⁸⁴.—[750.] Lower extremities deficient in sensibility and lying motionless (after three hours),⁹¹.

Generalities.—Very much emaciated,⁸².—Some half dozen slight convulsions,⁸⁰.—Convulsions,⁷⁹.—Frightful convulsions,⁷⁴ ⁹⁶.—After half an hour a sensation of thickening and stiffening of the muscles of the back of the neck, which soon extended to the flexor muscles of all the limbs, and which continued until the morbid action was broken in upon. This was not a condition of rigidity such as obtains in cramps, but subject to volition, and was rather of that feeling that we imagine would be experienced in a paroxysm of catalepsy could the patient be made sensible of the movements of his limbs,⁷⁷.—The child was under the influence of the Morphia; perfectly limber, for seven hours,⁸⁰.—Suddenly collapsed (four hours after second powder),⁹⁵.—Considerable degree of prostration and apathy,⁷⁷.—A few hours of lassitude, after the sound sleep,⁷⁷.—[760.] By keeping slightly under its influence, it is a perfect antidote against taking cold,⁹⁰.

Skin.—Livid,⁹².—Skin about face, neck, chest, arms, and hands had a cyanotic appearance (five hours after second dose),⁹⁵.—Skin yellow and shrivelled up,⁸².—Finger-nails dark (five hours after second dose),⁹⁵.—About a minute and a half after the operation a small pimple, with a diffuse rosy areola and slightly itching, is observed. In about twenty minutes the pimple becomes about four lines in diameter and one line in thickness; it is flattened. Its color is somewhat more than that of the skin, it is hard, its areola is very red, and about an inch and a half in diameter; its heat has increased, but the sensation of itching remains about the same. During the first hour the pimple and its areola are at their highest degree of development; from this time the appearances diminish, and at the end of two or three hours the red color of the skin has entirely disappeared, the pimple has become very flat, but it does not entirely disappear, until from twelve to twenty-four hours after the operation. If several punctures are made near each other, in the same manner, the appearances of the pimples are as above described, but the areolæ are confluent; the heat and itching are considerably increased. The appearances, however, disappear in the same manner as when a single puncture is made,⁷⁵.—Rash beginning on the face spread itself over the entire body, quickly extending from the face to the neck, trunk, and lower extremities; so strongly did it resemble

measles, at least in having the crescentic arrangement, that it had been pronounced such by another medical man; the discontinuance of the cause was followed by a speedy resolution of the seeming exanthem, and next day there was little trace of the eruption,⁸⁵.—Intolerable itching of the skin (after three hours),^{89 91}.—Itching and pricking of the skin intolerable,⁸⁰.—Considerable pricking of the skin,⁷⁷.

Sleep.—[770.] Frequent yawnings,⁷⁴.—Excessive drowsiness, “falling asleep, even while she was speaking,”⁷⁶.—Invincible desire to sleep,⁷⁶.—The tendency to sleep increased somewhat for a time, and twice fell asleep, though constantly talked to, but was soon aroused (after three hours),⁹¹.—Would sleep even when standing up, if those supporting him did not keep him constantly in motion⁸⁴.—Profoundly asleep, could not be aroused (five hours after second dose),⁹⁵.—Profound sleep; if left to herself she quickly fell into a state of profound stupor, and lost all consciousness, not breathing more than once in forty-six seconds (after five hours and a half),⁸⁰.—Profound somnolence for eighteen hours; partial somnolence between two hours and a half and three hours and a half,⁹³.

Fever.—Skin cold (after six hours),^{86 96}.—Skin cool; feet quite cold (after three hours),⁹¹.—[780.] Skin pale, rather cool, and bathed with perspiration,⁸⁷.—Extremities cold,⁹².—Hot and dry skin,⁷⁹.—Skin warm and moist,⁸⁰.—If he deferred the habitual dose beyond a certain number of hours, perspiration came on, and his system felt relaxed,⁸¹.—Body bathed with cold perspiration (five hours after second dose),⁹⁵.—Surface of face, scalp, and hands loaded with large beads of cold perspiration, which, about the nose and mouth, coalesced and trickled down upon the bed-linen,⁹³.—Clammy sweat over the whole surface,⁹².

MUSCARIN.

An “alkaloid” from *Agaricus muscarius*, L.

Authority. S. Ringer, M.D., *Lancet*, 1877 (2), p. 198, thirteen experiments on four men, seven, three, two, and one each respectively; $\frac{1}{3}$ of a grain given hypodermically.

Eye.—Lachrymation occurred in eight cases, amounting in some instances only to suffusion of the eyes, but generally the tears trickled down the face, so that the patient was obliged to wipe the eyes. It began in six to ten minutes, and lasted generally about twenty to thirty minutes. In each case the pupils became contracted, often considerably; the contraction beginning in about fifteen minutes. The vision seemed unaffected.

Mouth.—Salivation was not so constant as perspiration; moreover, the saliva varied in quantity more than the perspiration. Salivation occurred in eleven experiments, and was absent in four. In three it was slight, in the rest free or profuse. It began in from two to fifteen minutes, and lasted from twenty to eighty minutes.

Stomach.—In three experiments on one man with the larger doses, the drug induced vomiting once and once nausea.

Stool.—In the cases in which it purged, the injection took effect in from ten to twenty minutes. In two experiments the drug excited an inclination to pass a motion. In four experiments on the same man it produced a loose motion, one of a green color, though his bowels were opened naturally a short time previously.

Urinary Organs.—In five experiments the patients were obliged

to pass urine in from nine to fifteen minutes, and two complained of suprapubic pain.

Respiratory Organs.—In five it produced a frequent hacking cough.

Pulse.—In one of our four men the pulse was always very quick, in the other three it was natural. The effect on the normal frequency was *nil*, though in one man it reduced the frequency ten to sixteen beats.

Fever.—Sweating occurred in eleven of the thirteen experiments. $\frac{1}{2}$ a grain made it free, whilst larger doses, as $\frac{3}{4}$ of a grain and a grain, rendered it very abundant; indeed, it was sometimes as free as the perspiration excited by a $\frac{1}{3}$ to a $\frac{1}{2}$ grain of Pilocarpin. The perspiration stood in large drops on the face after the larger doses, the nightdress became soaked, and the skin felt sodden. Perspiration began in from three to fifteen minutes, occurring earliest after the larger doses. It lasted from half an hour to an hour and a half. On testing the reaction of the sweat in six experiments, we found it neutral in four and alkaline in two.

NĀJA.

Authorities. 46, Fr. Seevright, Lond. and Edinb. M. and S. J., March, 1842, p. 257, a child, æt. four years, was bitten on the foot by a cobra manille; 47, Lancet, 1859 (2), p. 13, woman was bitten on the arm by a cobra.

Pulse imperceptible at the wrist, ptosis and paralysis of the iris, with profuse diarrhœa; purple sordes on the lips, gums, and tongue,⁴⁷.—Breathing stertorous and difficult; pupils slightly dilated; skin clammy and disagreeably cold; languid, thready, and rapid pulse,⁴⁶.

NAPHTHA.

Authority. Lancet, 1856 (2), p. 230, G. H., æt. twelve years, drank some.

Insensible.—Eyes had a glassy appearance, and pupils were much contracted.—Countenance sallow.—Frothing at the mouth.—Gasping for breath.—Complete loss of muscular power.—Skin clammy.

NARCISSUS, PSEUDO-NARCISSUS.

Narcissus, Pseudo-Narcissus, L.

Natural order, Amaryllidaceæ.

Common name, Daffodil.

Authorities. Sidney Ringer, M.D., Journ. of Phys., vol. i, 1878-9, p. 437; (1 to 6, experiments with the alkaloid from flowering bulbs); 1, a small quantity of a solution of the sulphate of the alkaloid (strength, 1 in 5 of water) was dropped into the eye; 2, a woman, æt. eighteen years, received $\frac{3}{8}$ grain sulphate by hypodermic injection in the arm; 2a, same experiment repeated after two days; 3, effects of topical application to the eye; 4, injected hypodermically $\frac{3}{8}$ grain into a woman, æt. nineteen years; 5, another case; 6, injected hypodermically $\frac{1}{6}$ grain into a man, æt. thirty-nine years; (7 to 9, experiments with the alkaloid from bulbs that had flowered); 7, a man, æt. forty years, took $\frac{1}{2}$ grain nitrate (first day); $\frac{3}{4}$

grain (second day); 1 grain (third day); $1\frac{1}{2}$ grain (fourth day); 2 grains (fifth day); $2\frac{1}{2}$ grains (seventh day); $2\frac{3}{4}$ grains (eighth day); 3 grains (ninth day); 4 grains (tenth day); 8, same, afterwards took $\frac{1}{2}$ grain every two hours for two days, and on the third day took 1 grain every two hours; 9, effects of topical application to eye; 10, a man took 12 minims of a solution of the flowered bulbs; 11, same, took 4 grains alkaloid; 12, effects of 12 minims.

Head.—Frontal headache, in the evening (first day),².

Eye.—Slight running at the eyes (fourth day),⁷.—Pupils a little dilated (second day),⁷.—The pupil very shortly became widely dilated. This experiment was repeated on another person with the same result,¹.—Pupils contracted (in fifteen minutes); rather dilated (in thirty minutes),².—Pupils decidedly contracted (in nine minutes),^{2a}.—Pupils slightly contracted (seventh and ninth days),⁷; (fourth day),⁸.

SOLUTION 1 IN 10.				
No. of Exper.	Contraction began.	Dilatation began.	Dilatation lasted	
1		20 min.	6 days.	Drugged eye only contracted. Both contracted, drugged eye most. Both contracted, drugged eye earlier and most. Both eyes contracted, drugged eye most.
2		20 min.	3 days.	
3		35 min.	2 days.	
4		25 min.	4 days.	
5	5 min.	20 min.		
6	7 min.	26 min.	36 hours.	
7	4 min.	25 min.	3 days.	
8	4 min.	21 min.	3 days.	
SOLUTION 1 IN 5.				
9	5 min.	20 min.	6 days.	Both decided and equally contracted. Drugged eye only contracted; reduced from $\frac{1}{2}$ to $\frac{1}{4}$. Both contracted, but drugged eye most. Both contracted, drugged eye most.
10	5 min.	22 min.	9 days.	
11	3 min.	20 min.	More than 8 days.	
12	3 min.	20 min.	More than 5 days.	
SOLUTION 1 IN 3.				
1	No dilatation.			Both contracted, drugged eye most.
2	No effect.			
3	Very slight dilatation.			
4	No effect.			
5	Very slight dilatation.			

ALKALOID NO. 2, STRENGTH OF SOLUTION 1 IN 3.				
	Dilatation began.	Amount of dilatation.	Dilatation lasted.	Primary action.
July 27.	None.			Both pupils rather contracted, the drugged eye the most.
July 28.	3 hours.	Very decided.	Few hours.	Both pupils rather contracted, the drugged eye the most.
1 IN 5.				
July 31.	125 min.	Very slight.	Few hours.	Both pupils contracted, the drugged eye much the most; reduced from one-third to one-fifth.
July 31.	3 hours.	Very decided.	9 to 10 hours.	Slight primary contraction of drugged eye.
Aug. 7.	3 hours.	Decided.		Both pupils contracted, especially the drugged eye.
Aug. 7.	4 hours.	Slight.		Primary contraction of the drugged eye.
1 IN 10.				
July 19.				Drugged eye contracted decidedly.
July 20.				Drugged eye contracted decidedly.
1 IN 5.				
Aug. 7.	3 hours.	Decided.	4 hours.	Primary action of drugged eye.
Aug. 7.		Decided.		Primary action of drugged eye.
ALKALOID NO. 3, EXTRACTED WITH CHLOROFORM, 1 IN 5.				
Aug. 10.	Very slight dilatation.			

Mouth.—[10.] Mouth became moister in four minutes, and so continued for fifteen minutes,¹⁰.—Slight increase of the saliva without spitting, which passed off after the fourth dose.⁸.—Salivation (one and a half ounces),¹¹.—Slight salivation (in ten minutes); more marked (in one hour), (fourth day),⁷.—Free salivation, spat about an ounce of saliva (in eight minutes, fifth day),⁷.—In seventeen minutes free salivation occurred, and in the course of the following half hour he spat an ounce and a half of very ropy saliva (seventh day),⁷.—Salivation to the extent of an ounce of thick ropy saliva (eighth day),⁷.—Spat an ounce of saliva (ninth day),⁷.—Spat an ounce and a half of saliva (tenth day),⁷.

Throat.—Dryness of the throat (in twenty-five minutes),².

Stomach.—[20.] Hiccough (fifth day),⁷.—Slight hiccough, sinking and faint feeling (seventh day),⁷.—Heartburn (fifth day),⁷.—Sickness,¹².—Felt sick (in twenty minutes); vomited with a slight amount of retching (in thirty and forty minutes),¹⁰.—Felt a little sick, with a sinking sensation at the epigastrium (after one hour, second day),⁷.—Some sinking at the epigastrium, with slight nausea and hiccough (fourth day),⁷.—Sinking sick sensation (fifth day),⁷.—Sinking feeling (eighth and ninth days),⁷.—Rumbling in the stomach (first and second days),⁸.

Stool.—[30.] Diarrhœa, five motions in the day, with severe aching pain below the left false ribs (after second dose, third day),⁸.—Three large watery motions,¹².—Two watery stools,¹¹.—Loose stool (in two hours, ninth day),⁷.—Two loose stools (after one hour and a half, tenth day),⁷.—Relaxed stool, though previously he had suffered from constipation,⁷.—Semi-solid motion (after some hours, fourth day),⁷.

Pulse.—Pulse increased 12 beats,¹³.—Pulse accelerated by 10 to 12 beats per minute (seventh day),⁷.—Pulse increased from 10 to 13 beats per minute (fifth day),⁷.—[40.] Pulse 61 (before injection); rose to 116 and continued quick five hours,⁶.—Quickening of the pulse 12 beats per minute (eighth day),⁷.—Pulse 92 (before injection); rose to 124; continued quick two hours,⁵.—Pulse 84 (before experiment); rose to 128, continued quick two hours,⁴.—Pulse 84 (before experiment); 136 (in one hour); 102 (in one hour and forty minutes),².—Pulse fell 10 beats (in six minutes); rose 8 above initial beat (in twelve minutes); 22 above (in twenty-three minutes); after this it gradually fell, and in one hour and a half it was 112,^{2a}.

Generalities.—Slight faintness,¹¹.—Slight faintness and drowsiness (in a quarter of an hour, third day),⁷.—Greater faintness (tenth day),⁷.

Fever.—In twelve minutes the hands, which were quite wet with perspiration, became dry, and so remained for one hour and three-quarters,².—[50.] Hands, which were quite wet with perspiration, became dry (in twelve minutes),^{2a}.

NATRUM ARSENICATUM.

Authorities. (5 a and 8 b to 10 b, J. G. Thompson, Hahn. Month., vol. xiii, 1878, p. 599, observations, two years after the provings given in vol. vi of the Encyclopedia); 5 a, J. C. King, M.D.; 8 b, R. Ramage, M.D.; 9 b, O. R. Shannon, M.D.; 10 b, J. G. Thompson; 11, Dr. Gouffia, Med. Circular, 1859, vol. xiv, p. 254, took from the beginning of November till the next June, a dose at intervals of two days, increasing gradually from 5 milligrams to 4 centigrams.

Mind.—Feeling of nervousness all through the body. Feeling of gloom; want to sit quiet. Confusion and want of power to concentrate the mind on any subject,^{10b}.—Am more restless than was formerly my habit, so much so as to be noticed by others. Not so cheerful as before the proving. At times feel irritable, and then have not the usual desire to study, although the mind seems clear, and the memory as usual,^{6b}.—No mental symptoms have been observed, in my case, for eighteen months or more, but I notice that prover R. R. (^{8b}), with whom I am associated, has never fully recovered from the nervous restlessness and loss of power of concentration,^{5a}.

Head.—Dull aching pain in the frontal region on awaking in the morning; during the day severe pain in frontal region. Every motion jars the brain. Aching across the brow, over the orbits, and in the balls of the eyes. Face feels hot, and looks flushed at times,^{10b}.

Eye.—[560.] The action of the drug on the eyes was very marked at the time the proving was made, and the symptoms have since been so persistent that I fear the results are permanent. The eyes feel constantly weak, as if the lids must be kept closed to protect the ball. The conjunctiva seems dry and painful. When reading or writing, the eyes soon become tired and painful. A slight exposure to cold or wind produces congestion of the conjunctiva. After looking at an object a short time it becomes blurred and indistinct; the eyes are very sensitive to light. All

the eye-symptoms are worse in the morning, become gradually less severe, and disappear towards evening. The eyes do not suffer especially from artificial light.^{5a}—Eyes congested; eyes and orbital region much swollen. Agglutination of the lids on awaking in the morning. Eyes sensitive to the light. Eyes smart as from wood smoke. Edema of the orbital region. Inability to open the eyes wide as usual. Disposition of the lids to close. Inner surface of lower lid distinctly granular in appearance. Severe pain in the orbits and orbital region. The whole orbital region much swollen, and the bloodvessels of the ball and lids much congested. Smarting and lachrymation on going into the open air. Sight weakened,^{10b}.—My eyes became sound as usual about seven or eight months after I ceased taking the drug, have remained strong and well since.^{6b}.

Nose.—Dull aching at the root of the nose. Nose stopped up, right nostril most. Must keep the mouth open to breathe during the night. Discharge from the nose very profuse, commencing clear and watery, gradually becoming thicker, till finally it is tough and yellow. Thickening of the nasal mucous membrane; can inhale air, but have difficulty in exhaling. Yellow tough mucus drawn by inspiration, and hawking from the posterior nares. Sneezing brought on by inspiration of cold air,^{10b}.—The nasal mucous membrane is dry, the mucus becomes tough, hard, and sometimes when dislodged causes bleeding. From the posterior nares there is a dropping of mucus, which at times collects in a tough and very tenacious mass, causing considerable hemming and hawking to dislodge it,^{9b}.—Since taking the drug have been troubled with nasal catarrh. The nose feels stopped all the time, but is worse at night and in the morning. During the day there is very little discharge from the nose, but a feeling as though the mucous membrane were swollen. In the morning the nose feels stopped up, and pieces of hardened bluish-colored mucus are blown from it, after which the mucous membrane feels sore and raw. I take cold much easier than I used to,^{8b}.

Face.—Face flushed and hot; feels puffed. Heavy aching pain in ethmoid bone. Malar bones feel large, as if swollen. Muscles of mastication feel stiff, and motion of the jaw is painful,^{10b}.

Throat.—Thirsty, dry, stiff feeling in the fauces and pharynx. Hawking of tough yellow or grayish mucus. Thickening of the uvula, tonsils, and pharynx; irregular on the surface, swollen, purplish-red, and covered with an abundance of yellowish or yellowish-gray mucus. Soft parts of the throat thickened. Difficulty in modulating the voice. (The thickening of the mucous membrane of the fauces and pharynx did not entirely disappear for more than six months after I stopped taking the drug, but there was no soreness felt at any time),^{10b}.—The fauces feel dry on inspiration and on deglutition; the dryness is worse in the morning, and always after a cold,^{9b}.

Stomach.—During the whole time the appetite was excessive,¹¹.—[570.] The tenderness of the epigastrium noticed during the proving remains in a moderate degree. Have had frequent attacks of indigestion, lasting several days at each time. At such times the stomach feels sore, and anything warm or heating causes a sensation of burning, and can be sensibly felt immediately on entering the stomach. Previous to engaging in the proving I had not experienced any tenderness or pain in that region,^{9b}.—Tenderness in the entire epigastric region, most marked immediately below the ensiform. Pain through the abdomen. Bowels relaxed. Frequent passage of flatus. Feeling of nausea. Vomiting of large quanti-

ties of sour water. The odor of food is pleasant, but on attempting to eat it produces vomiting of a very sour fluid,^{10b}.

Abdomen.—The abdominal symptoms have not been prominent for some time; however, the bowels have not been regular since the proving, they are alternately relaxed and constipated; gas accumulates very rapidly, producing pain, which is only relieved by motion of the bowels or escape of flatus,^{5a}.

Respiratory Organs.—Ever since taking the drug the respiratory mucous membrane has been unusually sensitive to the influences of cold and irritating dust or vapor. Every day for two years I have hawked up more or less thick white mucus, while thick yellow mucus has been discharged from the posterior nares. These symptoms are aggravated by the inhalation of dust, smoke, etc. There is a tendency to the formation of dry crusts in the nose; when these are removed blood follows. There is a pretty constant compressive pain at the root of the nose. After a trifling exposure to cold my throat assumes the red puffy appearance noticed at the time of the proving; no pain accompanies this condition,^{5a}.

Chest.—Feeling of fullness and oppression in the chest. Dry cough. Cough looser, but no expectoration. Sharp quick pain in the anterior part of the chest, below the seventh rib. Soreness and oppression in the chest; worse on taking a deep inspiration. Tenderness on pressure in the supra-clavicular region. Lungs feel full and clogged. Respiratory sound very indistinct,^{10b}.—In the right side of the chest, beneath the cartilages of the fourth and fifth ribs, where irritation, pain, and soreness occurred when proving the medicine, there is an uneasiness, which on any physical exertion occasions a teasing sensation, producing a dry hacking cough and slight soreness, but never any acute pain. These symptoms are aggravated by deep inspirations, by dust, and a close atmosphere,^{9b}.

Heart and Pulse.—Pulse irregular, variable in volume, and slower than usual. The sounds of the heart are heard through nearly every part of the chest. Can feel the beating of the heart through the chest distinctly,^{10b}.

Back.—Severe pain between the scapulæ, causing an inclination of the shoulders forward for relief, felt at every inspiration, and gradually passing around below the point of the right scapula to a position on the right side of the chest, below the ninth and across the tenth rib; soreness commencing at the lower cervical vertebra, and extending as far down as the points of and under both scapulæ. On taking a deeper inspiration than usual, a stitching pain is felt in the space between the scapulæ,^{10b}.

Extremities.—The neuralgic pains in the extremities produced by the drug reappeared frequently during the first year. At times they were quite severe, and would remain for several days at a time. Recently they have not given me any trouble,^{5b}.

Superior Extremities.—Sharp stitches along the palmar surface of the fourth metacarpal bone, between the carpal and phalangeal bones, felt in both hands, but not in both at the same time. The lower extremities feel heavy. On commencing to move, pain and soreness in the right knee-joint. Dull pain on the inside of the popliteal space of the right leg, accompanied by a disagreeable feeling through the muscular part of the posterior portion of the leg, which passed off while walking. Cramp in plantar surface of right foot. Aching in the anterior part of the thigh, extending to the leg and ankle, beginning slightly, and growing worse, till a restless, uneasy feeling was produced,^{10b}.

Inferior Extremities.—[580.] The neuralgic pains in the lower

extremities have returned at intervals, apparently without any exciting causes; they appear chiefly in the left thigh, leg, and foot, and the nerves supplying the flexor muscles are alone affected.⁸—Dull cutting pain, lasting about five minutes at a time, and coming about every half hour, is felt along and about the length of Poupart's ligament, occurring on both sides at the same time. After the subsidence of the pain, a sickening sensation is felt in the left testicle, as if caused by a blow, and lasting about ten minutes. During the time this sensation lasted the testicle was extremely sensitive to the touch, even of the clothing, but this sensitiveness passed away each time the pain subsided. Urine light-colored, and increased in quantity,^{10b}.

Generalities.—Embonpoint very apparent; its discontinuance was followed by considerable emaciation,¹¹.

Skin.—The rash noticed during the proving has made its appearance on the face and neck at irregular intervals since, but has not remained long at any one time. A squamous eruption (not noticed either before or while proving the drug) has appeared on the chest along the sternum. The scales are quite thin, whitish, and when removed leave the skin slightly reddened. When the scales are allowed to remain the parts covered by them become itchy, especially so when warm from exercise,^{8b}.

NATRUM HYPOCHLOROSUM.

Authorities. 1, Dr. Robert T. Cooper, Brit. Journ. of Hom., vol. xxxv, 1877, p. 337, Labarraque's solution (Hypochlorite of soda), half a drop of the solution per diem, given well diluted in three doses before meals; any important alteration from this dose is stated; 2, A. Jacobi, M.D., Med. Record, vol. xv, 1879, p. 243, a man was told to use internally 10 drachms of the chlorate of soda within six days, but he took the whole within six hours.

Mind.—Much distressed, laughs, cries, and talks in her sleep; keeps her husband awake.¹—(Lowness of spirits increased).¹—Very low-spirited and depressed, could cry all day.¹

Head.—**Vertigo oculuca*; a very constant and a very characteristic symptom along with an aching across the forehead.¹—Swimming feeling, as though the top of the cranium were about to float off, worse when looking upward.¹—Momentary indescribable sensation all over her head.¹—Paralyzed feeling of her brain, with a similar sensation in all her limbs, and numbness of the tips of her fingers, and recurrent fainting.¹—Caused in a woman, æt. fifty-one years, great depression, and a feeling in the head as though the cranial bones were being crossed one over the other, and as if she must fall forward, a sort of silly feeling, with a nasty taste, just as she used to have after taking Iodide of potassium, but without the iodine coryza.¹—(The headache across her eyes and over the vertex is increased).¹—[10.] Pain across forehead, extending down the nose, and up over entire head, with great tenderness of the scalp, and a thumping noise in the ears, which is aggravated by lying on either side; has to place the back of her head against the pillow in order to gain sleep.¹—Pain darting from one temple to the other, coming and going with equal suddenness.¹—Throbbing headache in the left temple, coming on immediately after her midday meal, and going off after tea.¹—Pain in the right side of her head going from behind the mastoid process to the upper part of the orbit, "across the eye," causes the eye to feel stiff and weak, aggravated by having slept, but continuing by day as well as by night.¹—Pain under the

right ear when swallowing, with much pain, tenderness, and swelling up the side of the head, followed by a most painful gathering, which burst and discharged strongly.¹

Nose.—Influenza, with much nasal discharge, and sore places on the inside of her cheeks, which began on the left side.¹—Epistaxis; the blood comes away both by night and day in clots, and is dark-colored. (Produced in a pregnant woman).¹

Face.—Pain in the left side of her face, shooting up from a decayed tooth; the pain is worse the first thing in the morning, and the last in the evening, with the formation of gum-boils one after another, and sick feeling after taking food. (Produced?).¹—Pain, neuralgic, in the left side of the face, from the lower jaw, extending to the upper, and across the eyes and nose to the forehead, coming on irregularly, and lasting from an hour to an hour and a half. (After taking the Soda chlorata for four days).¹—A tugging pain in the left side of the face, aggravated by warmth, coming on every half hour, and flying up the side of the head to the ear. (Produced? I am unable to refer, while writing, to the source from which I took this symptom).¹—[20.] Swelling affecting the upper and lower jaw of the left side, with swelling on the inside of the jaw, between the gum and tongue, with throbbing in the part, and shooting pain extending up to the temples and down the left side of the neck; relief from cold applications, increased by worry, not interfering with appetite.¹

Mouth.—Teeth become loose, and a swelling forms along the right lower jaw, the gums are sore and the tongue swollen; there is much pain and tenderness along the jaw, which prevents his being able to masticate his food, but though this pain is worse at night, it does not hinder sleep in the early part of the night, but at midnight he awakes and does not fall asleep again till 5 or 6 A.M. This swelling suppurated in about two weeks. (Came on very soon after taking the Soda chlorata, in a phthisical patient).¹—His teeth become brittle.¹—The tongue is white and shrivelled at the sides, and there is a taste as if she had been sucking alum; appetite for meat fell off.¹—The tongue is furred in the morning, and there is a constant putrid taste throughout the day.¹—Swelling upon the right upper jaw, close upon the gum (gum-boil), very painful to the touch.¹—Apthous ulcerations in the mouth are a frequent result of using the Soda chlorata as a gargle.¹—Sores on the inside of her cheeks, which began on the left side, and gradually spread over the mouth, with nasal discharge and influenza.¹—Sore pimples come on the inside of the under lip at the commencement of the cold.¹

Throat.—The throat becomes red and sore. (Observed in a man of twenty-one, whose health was quite good, except for a nasal polypus).¹—[30.] Sore, irritable spots form in the throat and along both sides of the tongue.¹—His throat invariably becomes sore when taking it. (Observed in several cases).¹—Sore throat, with difficult deglutition; a flat ulcer forms on the tongue far back towards the root, after taking the Soda chlorata for a week, and goes away immediately it is discontinued.¹

Stomach.—Nausea and sick feeling; she becomes drowsy during the day, and wakeful at night.¹—When taken while the patient is recumbent the Soda chlorata gave rise to a feeling of sickness.¹—A weight seems to fall from across the pit of her chest to the pit of the abdomen, and an aching, dull sensation, indescribable, but different from an ordinary headache, occurs on the top of her head after each dose, and lasts for a quarter of an hour.¹

Abdomen.—Swelling low down in the abdomen, going up to her

chest, and causing dyspnoea, worse after eating, with a great deal of flatus,¹.—A bloated, tight feeling comes after eating and drinking across the upper part of the abdomen, and which is not lessened by loosening her clothing, and is accompanied by a sick feeling. (This symptom came on in a girl, æt. twenty-one years, four days after she had discontinued taking Soda chlorata, which had disagreed with her),¹.—In a girl of twenty-one years, an aching pain in her left side at her waist, preventing her from sitting upright,¹.—After taking the Soda chlorata for a week she got a fearful pain in the lower abdomen, which settled in the right hip-joint, and spread over the whole abdomen, as far as on a line with the umbilicus; it lasted a week, leaving her free from a tenderness of the abdomen that she had had for a year, and free also of pain in the hip-joint (right), and of an inability to flex the hip upon the abdomen from pain; and besides, she ceased to pass “white gravel,” which she had been voiding for the last twelve months with great suffering. (On referring to the notes of this previously troublesome case, I can, with present experience, come to no other conclusion than that the primary cause was ovarian; the symptoms had followed upon the cessation of a metrorrhagia. The woman’s age was thirty-four years),¹.—[40.] (There was an aggravation of the following already existing symptoms; soreness in the lower abdomen, as if bloated, with intense pain on placing her hand there; next day felt the tenderness with distended feeling higher up round the hypochondria, obliging her to unfasten her clothing; trembled all over; her knees felt too weak to support her body; the lower part of her back became excessively tender, and the burning in the vagina, an old symptom, reached an unendurable pitch),¹.

Anus.—In a woman, aged forty-two years, cutting pain like knives in the anus, which comes on every evening between 6 and 7 o’clock, and goes away during the night, but not at any stated hour,¹.

Stool.—Confinement of the bowels for three days, and then passage of a large hard offensive motion,¹.

Urinary Organs.—Within twenty-four hours he suffered from diffuse nephritis. What little urine he passed was smoke-colored, and afterwards black. It contained a large percentage of albumen, blood, hyalin, and granular casts. Then there was complete suppression. There were vomiting and diarrhoea, headaches, and coma. He died on the fourth day,².—In a little girl of three years, scalding when urinating, with soreness, itching, and smarting of the vagina,¹.—In a female, aged thirty-two years, it brought on excessive action of the kidneys after each dose, the patient was at the time supposed by Priestley to be suffering from cauliflower excrescence of the uterus,¹.—In a woman with mitral valve lesion a quantity of red sand was found in the urine for the first two days after taking the Soda chlorata. She never remembers such a symptom before. (The dose being one drop in a wineglassful of water),¹.

Sexual Organs.—Almost unconquerable sexual desire after each dose, with priapism,¹.—Great sexual excitement comes on after each dose, in a man, aged twenty-five years, of impressionable temperament,¹.—She cannot take the Soda chlorata, as it causes a feeling as of “opening and shutting” in the womb. (In a healthy woman, aged sixty-five years),¹.—[50.] Uterine bearing down; severe backache, and headache affecting the temples and back of the head, making her feel “light-headed” and sickish, generally worse at night,¹.—Violent metrorrhagia,¹.—The monthly period comes on at once, a week before its time, in a perfectly healthy woman, after a dose of two drops in water,¹.—The monthly illness a week

over time, and during the first day has more than usual aching in the back. (In a fairly healthy girl, aged twenty-one years),¹.

Respiratory Organs.—Cough, distressing, with a little phlegm, continual during the day. (In a woman, æt. thirty-five years),¹.

Chest.—Tightness on the chest, with dyspnoea, inability to move quickly; a feeling of weight in front of her chest; these usual symptoms become aggravated, and there appears as a new symptom pain under the heart, with catching inspiration; these symptoms ceased on discontinuing the Soda chlorata,¹.—(A feeling in front of the chest, as if something were gnawing at the chest, was aggravated),¹.—Pain across the upper part of her chest, off and on, and pain with fulness across the hypochondria, with pains extending down from both sides of her waist to the womb, causing a phlegmy discharge,¹.—Pain under the left axilla and left mamma, aggravated by lying down, with a sickish giddy feeling. When walking about is obliged to keep sitting down,¹.

Back.—Much pain across the small of her back, worse on getting up in the morning, existing along with a want of appetite for breakfast, but a fair appetite for supper,¹.

Extremities.—[60.] An aching in all her limbs, and a feeling as if bereft of all power, and as though she would faint upon the slightest movement,¹.

Superior Extremities.—Both hands are swollen every morning. (Observed in about three cases),¹. NOTE.—This morning swelling of the hands appears to be a very characteristic symptom.

Inferior Extremities.—Pain in both hip-joints, and in the calves of her legs, with tingling extending to her toes,¹.—Extreme weakness in her ankles and knees,¹.

Generalities.—Rapid emaciation (in a girl of twenty-one years),¹.—She becomes quite overpowered (from $\frac{1}{8}$ of a drop three times a day, in a woman, æt. sixty-five years),¹.—In a delicate, highly nervous woman, suffering from uterine weakness that followed two months after her confinement, the Soda chlorata, after removing most of the symptoms within the first fortnight of treatment, began to tell on the patient. She became very weak, with shooting pains all over the body, and in the limbs, especially between her shoulders, and at the points of her shoulders (the inferior angles of the scapulæ), worse in the morning before getting up; these shooting pains are worst in the arms, and very bad in different parts of her head; day and night, but principally by day, she has much headache, worse, if anything, on the very top of her forehead, an aching pain without throbbing,¹.—In a delicate anæmic woman, suffering from uterine weakness, the Soda chlorata caused a pain to appear in the left infra-mammary region, which affected the left side of the chest, the shoulders, and top of the head; the shoulders became stiff and painful, and the top of her head and side felt tender to touch and ached, an unbearable pain; felt drowsiness after meals, the left hand, and left alone, was swollen one morning after waking, and next morning the right only was similarly affected. The bowels became confined and less urine was voided,¹.—In a decidedly consumptive girl, æt. sixteen years, it improved her cough, and made her feel stronger; its continued use made her feel drowsy and lazy, as if she could lie in her bed all day, and her skin became covered with pimples, that smart after washing, and upon going into the open air; the slightest drop of cold water as a drink irritates these pimples,¹.—In a delicate consumptive girl, subject to convulsive seizures and bearing down in the lower abdomen, the first dose caused a strange lifeless feeling, which

made her apprehensive of fainting, followed in about an hour by sickness; this was succeeded some three days afterwards by *vertigo caduca*; the bearing down temporarily improved,¹.—[70.] Great exhaustion, as if about to die before the bowels act; sudden and forcible expulsion, with consequent complete relief,¹.—Aggravation of symptoms before each monthly period. (Observed in many cases),¹.—Pulsatilla is antidotal to many of the aggravations from Soda chlorata; Guaiacum seems to lessen the rheumatic and myalgic pains. The Pulsatilla influence I have several times observed, that of Guaiacum only twice. Strychnine overcomes the powerless feeling produced by it,¹.—**Its nervous symptoms come on very irregularly*,¹.

Skin.—Pimples are thrown out on her skin, which smart when washed or when going into the open air; the slightest drop of cold water as a drink irritates these pimples,¹.—Pimply rash appears on her face and irritates a great deal, especially at night,¹.—In a woman of thirty-one years, from three-quarters of a drop, diluted: Red smarting rash on the face and neck, worse after meals or after warm drinks; a uniform redness, with tendency to blister, "as if from a mustard-plaster,"¹.—Sores, angry-looking and moist, break out about the mouth,¹.—Small gatherings form on the fingers of both her hands,¹.

Sleep.—**Drowsiness after meals*,¹.—[80.] Drowsy during the daytime, wakeful at night,¹.—She is unable to sit down without falling asleep; her appetite falls off, but bowels are regular and tongue clean,¹.—Heavy sleep, with much disinclination to get out of bed, in the morning,¹.—The child, when asleep, has a ghastly look, as if dead. His sleep is quiet,¹.

NATRUM LACTICUM.

Sodium lactate.

Authorities. 1, Preger, Centrabl. F. Med. Wiss., 35, 1875 (Amer. Obs., 1876, p. 307), effects of *Natrum lacticum* when subcutaneously injected, or given internally in large doses; the same from fresh, and especially sour milk, whey, and very concentrated sugar-water; 2, Botticher, Berlin Klin. Woch., 1877, p. 538, effects of large doses.

Unusual hunger and thirst (in some cases),².—Vomiting (effects of very large doses),².—Great weakness of the lower extremities, analogous to the *anxietas tibiarum* noticed after great physical exertion,².—Rheumatoid pains have been noticed (Senator, Berlin Med. Woch., July, 1876),².—Hypnotic effects occur in about one-third of the cases, sometimes simply making the normal sleep more prolonged and sounder; in other cases it causes an abnormal sensation of fatigue, yawning, and sleepiness,².—Sleep,¹.

NATRUM SALICYLICUM.

Authorities. 2, Brit. Med. Journ., quoted by the Review, p. 376 (Hahn. Month., vol. xiii, 1877, p. 56); 3, A. D. L. Napier, M.B., Practitioner, vol. xviii, 1877, p. 411, an old gentleman, for rheumatic affections of the wrists and ankles, took 20 grains every three hours for more than a week; 4, John A. Erskine Stuart, *ibid.*, p. 425, effects of a 15-grain dose; 5, Weckerling, Deutsche Archiv für Klin. Med., vol. xix, 1877, p. 319, a woman, who had formerly suffered from hæmoptysis and pleuritis with effusion, and now continued to have fever, took several evenings 5 grams at a dose, but this day took 15 grams, at 1 P.M.; 6, Hemlein, *Ærz. Intell. Blatt.*, April, 1878 (Lond. Med. Rec., May, 1878, p. 211).

Urine passed after three hours kept fresh and free from ammoniacal

odor, and perfectly clear when exposed to the air for ten days.⁴—The patient was a woman, aged forty years, whose hearing was supposed to be impaired. She was not subject to giddiness. It was her first attack of acute rheumatism, and there was no cardiac affection. On January 26th, Salicylate of soda was commenced in doses of 25 grains every three hours. On the 28th she complained of noises in her ears, deafness, and giddiness, which the next day had increased so much that the drug was omitted. The following day the giddiness was much less, and by the 31st had almost gone. On February 6th the same dose was resumed; on the 7th the same symptoms were complained of. The noises in the ears were constant; a watch was heard only at two inches distant from each ear, and was not heard at all on either side when in firm contact with either zygoma or mastoid process. A tuning-fork on the vertex was heard fairly well, but the sound was not increased by closing the ears. The giddiness was slight and indeterminate as long as she lay still, but was very considerable and definite when she raised her head or sat up. Objects before her all seemed moving to the right. On the 8th these symptoms continued, and the Salicylate was discontinued. On the 10th the giddiness was gone, and she could hear the watch at a distance of six inches from each ear, and could hear it, although faintly, in contact with the zygoma or mastoid process, but not when in contact with the parietal eminence. On the 23d the Salicylate was resumed, and eighteen hours after its resumption deafness and giddiness had returned, which again ceased a day or two after discontinuance of the drug. When the patient was convalescent, a careful examination of the state of hearing revealed very little abnormality, the only difference being that the watch in contact with the skull was not quite so distinct on the right side as on the left. In another case I have seen similar symptoms of deafness and definite vertigo produced by Salicylic acid.²—Vomiting; unconsciousness, with at times wild delirium, from which she recovered with loud cries; great heat; dyspnoea; difficult hearing (after two hours); pulse 120 (the previous day it had been 92). The most remarkable symptom was the respiration; it was somewhat slower than it had been before, being now 28, while the day previous it was 32; respiration was so noisy, that it could be heard in the street; when the dyspnoea was most violent she had to be supported in a half sitting posture, gasped for air; respiration was exceedingly forcible; there were no objective signs of dyspnoea, like retraction of the chest, of the clavicular fossæ, or of the hypochondria; the respiration continued so difficult that it was surprising that a patient so weak could breathe with such force. Diarrhoea; great thirst; difficult hearing (second day); no sweat (first and second days).⁵—C. K., a house painter, aged forty-five years, had rheumatic inflammation of the elbow and knee-joints. The pulse was intermittent throughout the course of the case, raising the suspicion of a fatty heart, which was further indicated by the pasty appearance of the patient, and by his acknowledged addiction to alcoholic liquors. During the first ten days, Salicylate of soda was given in hourly doses of 7.7 grains (0.5 gram) without any effect. Thereupon the dose was increased to 60 grains (4 grams), with the following result. Soon after this first dose was given, there came on intense tingling and itching of the skin. The left side of the face, the lower extremities, and the right side of the chest were diffusely reddened, while both eyelids, the upper lip, and a great part of the legs were slightly œdematous. The pulse stood at 90, temperature at 101.8° F., and the urine was slightly albuminous. At the same time all pain in the affected joints had vanished,

and they could be moved freely about. By the next morning the redness had disappeared, and the pulse and temperature had fallen respectively to 80 and 100° F. In order to ascertain how far these symptoms were the result of the treatment, it was determined to repeat the dose at the next opportunity. The patient continued free from pain for the next three days, but on the fourth day the articular pains returned with such severity that the patient himself begged for "the large powder." 60 grains were given; after fifteen minutes severe burning pain in the frontal integument supervened, and five minutes later strong itching on the back of the right hand. In half an hour a marked eruption of urticaria was established over the greater part of the body, especially the legs and abdomen, with some oedematous swelling of the arms, eyelids, etc. This disturbance moderated in the course of two or three hours, and had completely subsided the next day. Subsequently, several smaller doses were administered without producing any of the above effects, and the patient recovered. After his recovery the patient consented once more to take the larger dose, and the result was precisely the same as before.⁶—Became very deaf, had ringing noise in the ears; severe headache; thirst; loss of appetite; felt dull and heavy.³

NATRUM SULFURICUM.

Authority. 6, Dr. W. Roc, Practitioner, vol. ii, 1869, p. 239, ordered 10 grains of the bisulphite in distilled water with tincture of orange-peel, three times daily, for a girl troubled with ascarides.

[900.] Suffering greatly from headache (second day),⁶.—Flushed face (second day),⁶.—Furred tongue (second day),⁶.—Pain all over the abdomen (second day),⁶.—The bowels had not been moved for three days (second day),⁶.—Passed very little urine,⁶.—Very feverish (second day),⁶.

NITRI DULCIS SPIRITUS.

Authorities. 9, T. W. Hill, Lancet, 1878 (2), p. 766, a child, aged nearly three years, swallowed about 3 or 4 ounces; 10, H. C. Lawrence, *ibid.*, 1879 (1), p. 9, a lad, aged eighteen years, took almost daily, for three weeks, an ounce.

Delirious and incoherent in his manner, drowsy as if he had been taking alcohol. When he was roused he could answer questions, complained of headache, and said he found it difficult to walk straight of late. He could see clearly, the irides being somewhat dilated, acting feebly. Skin and tongue dry, breath smelling strongly of ether. Pulse 60, small and hard. Constipation well marked. Urine had not passed since early morning, and had been scanty of late. Bladder empty on pressure above pubes,¹⁰.—In a compe state of collapse, cold and almost pulseless, insensible, both pupils fixed and widely dilated, breathing hardly perceptible. Later, vomiting and purging set in, with stertorous breathing, and death occurred in twelve hours.⁹

NITRO-MURIATIC ACID.

Authority. 5, H. Scott, M.D., Amer. Med. Recorder, vol. i, 1818, p. 84; the acid used was formed by mixing three parts of the Nitrous acid with one of Muriatic acid.

Bombay, April 27th, 1798. I bathed in a bath which was merely acid-

ulous. It covered the whole body below the head. I staid in half an hour, and it was nearly of the temperature of the body.

April 28th. Bathed again, keeping the bath at the same temperature or making it rather higher, and of the same strength in regard to acid. I staid in it half an hour. I still feel no material effects from the bath. Pulse after bathing 76. The only apparent action of the acid is on such animal matters as are unprotected by life, with which it forms an acid soap.

29th. Bathed again, and continued as before, for half an hour in the bath. To day the bath was hardly as hot as the body. About half an hour after bathing yesterday, I became sensible of an odd sensation about my gums, my jaws, and my teeth.

30th. Bathed again, and staid half an hour in the bath. It was rather warmer than my body. Since yesterday I have been sensible of some uneasiness in my throat on swallowing. I feel a disposition to salivation at times, but I am otherwise well. My gums, both above and below, are somewhat reddened. I was for some time disposed to ascribe these effects to imagination, but they have continued all this day, and leave me no doubt of their reality. I am in good health.

May 1st. Since yesterday I have felt some pain in my throat, especially on swallowing. This pain seems to follow the course of the œsophagus. During the whole of this forenoon, I had a sense of *burning* over the roof of my mouth and down the gullet. This sensation is like what arises from having chewed an acrid vegetable substance; and is so unpleasant, that unless it leaves me by to-morrow, I shall bathe no more. To-day I bathed as usual, staying in the bath for half an hour. It has been to-day, and is, in general, so acid as to make my skin smart a good deal in many places.

2d. My mouth, etc., though not in the least ulcerated, is somewhat painful. I am sufficiently convinced of the great power of this bath, and shall bathe no more. My digestion is improved, and I feel that my liver, unclogged by disease, is doing its office with facility, which for some time past has not been the case with me.

6th. I have not bathed again, but I still feel the effects of the bath in my mouth. My appetite is now good, and I sleep with tranquillity, which I had not done of late. With all this, my pulse is quicker than usual, and I am sensible of some degree of languor. It is, however, to be observed, that the weather is very hot, the thermometer being, during the day, in the shade, from 92° to 96° of Fahrenheit.

June 6th. For a fortnight after giving up the bath I was sensible of some of its effects upon my mouth, and my pulse remained too quick. I am now remarkably well. My liver seems to be sound, and I have experienced a happier change than I ever did from Mercury. Mere sponging the skin with Nitro-muriatic acid, sufficiently diluted with water, gives rise to the very same effects with bathing. Fifteen or twenty minutes may be employed in the sponging, though I found that a much less time does produce very material effects. When the bathing or sponging is carried to a considerable extent, and when the system is much under its influence, a sense of weakness comes on occasionally; some nervous irritation and restlessness are felt, a taste of metal (generally compared to that of copper) becomes sensible; a sense of pain occurs in some parts of the palate or mouth, which is not permanent, but comes and soon goes off again. At length little specks or small ulcerations, extending no deeper than the cuticle, are seen on the interior surface of the mouth and over the tongue,

so that some degree of excoriation or rawness is at last produced. This is attended by a considerable discharge of saliva, with an increase of the feeling of lowness or depression. These effects resemble those of Mercury, but they are not the same. The excoriation from the Nitro-muriatic acid never reaches deeper than the cuticle; it never gives rise to fetid ulcerations of any kind, nor does it produce the least offensive smell of the breath nor in the mouth. The effects of it in this way are surprisingly fugitive. At one hour the discharge of saliva may be excessive; the next it will stop, and perhaps suddenly come on again. The excoriations in the mouth generally go away in a day or two if the remedy be discontinued, and appear no more. While the mouth in this way is affected by the acid, the teeth partake of uneasiness; but I never saw this in a considerable degree, nor have I known any injury done to the teeth or their sockets. These last-mentioned effects are seldom met with to the extent that I have described, and need not be excited unless some peculiar circumstances require an unusual power, such as the symptoms of syphilis. I have lately added more and more of the Muriatic acid in proportion to the Nitric, and the effects have proportionately increased. I now make use of equal parts of the acids. It sometimes very suddenly increases the secretion of bile, and this effect may be kept up for a length of time. It increases the perspiration, and often to a great extent. Whether the acid be applied to the inner surface of the stomach, or to the external surface of the body, the effect is the same in kind, though not in degree.⁵

NUX MOSCHATA.

Authority. 18, C. G. Mitscherlich, Pharm. Journ., vol. ix, 1849, p. 233, effects of large doses of the volatile oil.

Diarrhœa,¹⁸.—Increased secretion of urine,¹⁸.—Excites the vascular system and the respiratory organs,¹⁸.

NUX VOMICA.

Authorities. 70, Lancet, vol. x, 1826, p. 732, a young woman swallowed a pennyworth; 71, John Horan, *ibid.*, 1856 (2), p. 11, a man, aged thirty-five years, swallowed $\frac{1}{4}$ ounce of the powder.

Looked very excited,⁷¹.—A strong general tetanic spasm, which was very much increased when an attempt was made to wipe the perspiration from the face,⁷¹.—Paroxysms from time to time; the patient stretched out her arms, clenched her fists, and threw her head back, whilst at the same time the jaws were firmly closed, the countenance much distorted by the contraction of the muscles, and strongly expressive of agony,⁷⁰.—Bathed in perspiration,⁷¹.

OCIMUM.

Authority. 2, Mart, Arch. der Pharm., May, 1851, p. 226 (Pharm. Journ., vol. xi, 1852, p. 82), effects of a weak infusion of the entire plant.

It is employed in baths, for rheumatism,².—[20.] It acts as an irritant,².—Sudorific,².

OCIMUM BASILICUM.

Ocimum basilicum, L.

Authority. M. Peckolt, *Archiv der Pharm.*, May, 1851, p. 226 (*Pharm. Journ.*, vol. xi, 1852, p. 82).

Women mix it with snuff partly on account of its pleasant odor, and partly because it is thought to clear the eyes.

This plant is very much employed in baths as a tonic.

OLEANDER.

Authority. 18, Dr. T. Murray, *Indian Med. Gaz.*, 1877 (*Lond. Med. Rec.*, Feb., 1878, p. 87), R. D., aged thirty-five years, took a strong infusion of 4 ounces of the root for the cure of a Guinea-worm in his left leg, and died on the fifth day.

Insensibility,¹⁸.—Eyes turned up,¹⁸.—Stiffness of the muscles of the jaws,¹⁸.—Bitter taste in his mouth,¹⁸.—Vomiting,¹⁸.—Severe cramps in the abdomen,¹⁸.—Weak, thready pulse; afterwards barely perceptible pulse,¹⁸.—[430.] Severe cramps in the extremities,¹⁸.—Fingers rigid, and the thumbs turned into the palms,¹⁸.—Convulsive spasms, with cold and clammy skin, and the pulse was barely perceptible,¹⁸.—Cold, clammy skin,¹⁸.

OPIUM.

Authorities. (351 to 353, from Franklin Scott, *Inaug. Diss.*, Philad., 1803, p. 18); 351, gave Mr. J. A., æt. twenty-three years, 40 drops of tincture; 352, I took 2 grains, rubbed down, with a little water; 353, Mrs. H. took 6 drachms of tincture; 354, Dr. Dufresne, *Bib. Hom.*, vol. i, 1833, p. 227; 355, J. B. Biddle, M.D., *South. Med. and Surg. Journ.*, July, 1851, p. 427, a woman took 2 fluid ounces of Laudanum; 356, A. Hadden, M.D., *Amer. Med. Times*, vol. i, 1860, p. 149, Mary McD., æt. twenty-eight years, took a dose of Laudanum; 357, H. J. Horton, M.D., *Med. and Surg. Reporter*, vol. xv, 1866, p. 225, Mr. E. H., æt. thirty years, took 3 ounces of Opium; 358, same, *ibid.*, vol. xiv, p. 336, a child, two weeks old, took 6 drops of Laudanum; 359, Henry Gibbons, M.D., *Pacific Med. and Surg. Journ.*, 1868, p. 163, Mrs. — swallowed a gill of brandy, and immediately after $\frac{1}{2}$ an ounce of Laudanum; 360, J. E. O'Brien, M.D., *Chicago Med. Journ.*, vol. xxvi, 1869, p. 720, Emmy C., æt. two years, swallowed 13 pills of gum Opium, each containing about $\frac{1}{4}$ grain; 361, F. W. Campbell, M.D., *Canada Med. Journ.*, vol. vi, 1870, p. 62, A. B., æt. thirty-two years, took about 2 ounces of Laudanum; 362, J. B. Chaggon, M.D., *ibid.*, p. 409, Mr. A. G. took same quantity; 363, S. W. Morrison, M.D., *Philad. Med. Times*, November, 1875, p. 106, a child, æt. four weeks, took an indefinite amount; 364, J. C. Morse, M.D., *Pacific Med. and Surg. Journ.*, 1876, p. 56, a man swallowed between 40 and 70 grains of Opium; 365, omitted; 366, C. H. Morfit, M.D., *Phil. Med. and Surg. Rep.*, 1877 (2), p. 466, poisoning from swallowing $\frac{1}{2}$ ounce of Laudanum; 367, Wm. T. Plant, M.D., *New York Med. Rec.*, vol. xii, 1877, p. 717, a man, while intoxicated, took 1 ounce of Laudanum, and died; 368, Dr. Janvrin, *Amer. Journ. of Obstet.*, vol. xi, 1877, p. 780, a child, æt. five weeks, took 10 drops of Squibb's liq. Opii. com.; 369, T. G. Nasmyth, M.B., *Edinb. Med.*

Journ., December, 1878, p. 505, a woman swallowed about 12 drachms of Laudanum, and died in thirty-six hours; **370**, F. A. Southain, Brit. Med. Journ., 1878 (1), p. 824, a man, æt. thirty-eight years, took a quantity of Laudanum; **371**, North Carolina M-d. Journ., 1879, p. 65, Bettie R., æt. thirty years, swallowed upwards of $1\frac{1}{2}$ fluid ounces of official tincture of Opium; **372**, Dr. Mielucho Maclay, Chemist and Druggist (Nature, vol. xix, 1879, p. 492), observations of Dr. Clouth.

Mind.—In the forenoon of the second day her mind was very much disturbed at intervals and by paroxysms; during one of these she would leap out of bed, and, notwithstanding all opposition made by the nurse, would run downstairs and escape from the doors. These exertions would exhaust her strength, and before she could get far would become faint, fall down, and beg to be carried to her bed; she would then be composed for a time, till seized with a second paroxysm. These were repeated several times during the day.³⁵³—[**2300.**] Hallucinations,³⁶⁶—The sleep which he had that night was not natural; he passed the night in some jactitation, attended with delirium and frightful dreams,³⁵¹—Exhilaration of spirits (after forty-five minutes),^{351 352}—A sensation which he compared to intoxication (after thirty minutes); had subsided considerably (after sixty minutes),³⁵²—The stupor and lethargy were so great that he went to bed at 9 o'clock (after three hours and a quarter),³⁵¹—Stupor,^{352 355 360}—Stupid, livid, and unable to stand,³⁶⁷—Unconscious,^{355 363 368}—Perfect insensibility; he could not be roused in the slightest degree by rough handling or loud shouting (after three hours),³⁶¹—Insensible and snoring loudly (after two hours),³⁶⁴—[**2310.**] Deep coma,^{359 369}, etc.

Head.—Vertigo (after thirty minutes),³⁵¹—Vertigo, much worse on trying to walk (after two hours),³⁵²—Whenever an attempt was made to walk I staggered a little, and felt as if intoxicated with wine (after five hours)³⁵²—Turgescence in the head (after ten minutes),³⁵¹—Sensations of turgescence in the head (after forty minutes),³⁵²—Pain in the head (after two hours),³⁵³—Pain in the head and over the eyes (second morning),³⁵²—At 10 A.M. the pain in the head increased, attended with a sensation of throbbing in the brain, which was almost intolerable (second day),³⁵²—First proving: After preparing the 24 cent. trituration, put 1 grain on the tongue. There were no marked symptoms through the day, except a constant sensation of frontal headache, which I attributed to the heat of the day, and not to the Opium. At night I slept badly, and much less than usual. The next morning I took a new dose of the 1st trituration. The frontal malaise increased, the head was heavy, and I experienced loss of energy. That night I slept none at all, but there were no disagreeable symptoms. During the whole time that I remained in bed I had no sensation in the head, but on rising in the morning the malaise returned. Towards 11 A.M. I was seized with vertigo, which seemed to me the precursor of the migraine to which I had been subject for more than twenty years. It disappeared and gave place to a headache, which passed off in about three-quarters of an hour. After this I experienced præcordial anxiety, with pain in the stomach, to which I had formerly been subject with the migraine. I was soon obliged to sit down and rest, and I found myself covered with cold sweat, excessively fatigued, succeeded by nausea. All this, however, was nothing new to me, although I had not suffered from so severe an attack for more than fifteen years, and it was entirely out of proportion to the severity of the head symptoms. These distressing sensations did not last long, and I returned to my house and lay down and rested,³⁵⁴.

Eye.—[2320.] Eyes red (after eighty minutes),³⁵².—Eyes very red (after two hours),³⁵³.—Eyes glazed, half open, pupils moderately dilated, and immovable (in half an hour),³⁷¹.—Eyes half open and fixed,³⁵⁹.—Eyelids closed (after two hours),³⁶¹.—Heaviness over his eyes (after thirty minutes),³⁵¹.—Conjunctivæ considerably injected (after two hours),³⁶¹.—Conjunctivæ insensible,³⁷⁰.—No reflex action was excited by touching the eye itself (after three hours),³⁶¹.—Pupils insensible to light (after seven hours),³⁶³.—[2330.] Pupils very much contracted and insensible to light (after one hour and a half),³⁵⁶; (after three hours),³⁶⁷.—Pupils contracted to a point (after ten hours),³⁵⁵,³⁶⁰, etc.

Ear.—Ears and back of neck livid (after two hours),³⁶¹.—Tinnitus aurium (after sixty-five minutes),³⁵¹.

Nose.—Nose pinched like a cadaver and could not inspire through it (after three hours and a half),³⁵⁷.

Face.—Face pale (after two hours),³⁵³.—Face pale and ghastly (after two hours),³⁶¹.—Face suffused (after forty minutes),³⁵².—Complexion somewhat cyanotic,³⁷⁰.—Lividity of countenance,³⁵⁵.—[2340.] Face and lips swollen and livid (after one hour and a half),³⁵⁶.—Countenance of leaden, deathlike hue,³⁵⁹.—Livid lips,³⁵⁹,³⁶².—Lips and tips of ears livid (after three hours),³⁶¹.—Jaws clenched (after two hours),³⁵⁸.

Mouth.—Teeth clenched (after two hours),³⁶¹.—Tongue projected, tumefied, and blue (after three hours),³⁶².—Tongue swollen and thrust between the lips, and trembling (after ten hours),³⁶⁰.

Throat.—Spasm of the throat,³⁵⁵.—Inability to swallow,³⁵⁵.

Stomach.—[2350.] No appetite (after three hours),³⁵².—Nausea (after forty-five minutes); increased (after seventy-five minutes),³⁵¹.—Slight nausea (after twenty-five minutes),³⁵².—In the forenoon of the second day the stomach became much affected with nausea and vomiting, everything she swallowed was soon rejected,³⁵³.—In five hours had vomited two or three times, in consequence I felt much relieved, though I continued very stupid. The next day a deadly nausea came on me every half hour, and a puking, at first of phlegm, but soon after a copious discharge of bile ensued; every kind of drink was thrown off my stomach soon after it was taken. At 1 o'clock took a draught of a mixture of a solution of salt of tartar, with lime-juice; this, however, was puked up immediately; it increased the nausea and sickness. I vomited at last a dark-greenish liquid, which deposited in the bottom of the vessel a sediment of the same color,³⁵².—In the course of the second night her stomach became much swelled with flatus,³⁵³.—Unpleasant sensation about the region of the stomach (after two hours),³⁵³.

Respiratory Organs.—Respiration slow, but not stertorous (after two hours),³⁵⁸.—The breathing 9 respirations per minute (after seven hours),³⁶³.—Respiration stertorous, irregular, and even sometimes interrupted for a considerable time (after three hours),³⁶².—[2330.] Breathing was loudly stertorous; respirations only 3 per minute (after two hours); 5½ per minute, jerking and stertorous (after three hours),³⁶¹.—Respirations consisted of a series of two or three feeble gasps, with complete intermissions of from one to three minutes (in half an hour),³⁷¹.—Breathing stertorous,³⁶⁹.—Respiration irregular and not full,³⁵⁹.—Respirations about 4 a minute, very feeble,³⁷⁰.—Respiration slow and difficult (second morning),³⁵².—Breathing extremely slow and interrupted, stertorous, and gasping,³⁵⁵.—Respiration feeble and irregular (after ten hours),³⁶⁰.—Diffi-

culty of breathing (after two hours),³⁵³.—Respiration difficult, as if almost suffocated (second night),³⁵³.

Heart and Pulse.—[2370.] Anxiety at the præcordia (after two hours),³⁵².—Sense of heaviness and oppression of heart (after eighty minutes),³⁵².—Strong pulsation in the carotid arteries (second day),³⁵².—Heart's sounds very weak (after three hours),³⁶¹.—Pulse imperceptible, the heart's action feebly dirotic, irregular, with not more than 40 contractions in the minute (in half an hour),³⁷².—Pulse very quick and irregular, and so weak as to be with difficulty perceptible,³⁷⁰.—Pulse 146, irregular in volume and rhythm (after two hours); 140, very feeble, compressible, and irregular (after three hours),³⁶¹.—Pulse 110 and intermittent (after three hours and a half),³⁵⁷.—Pulse 100 (after one hour and a half),³⁵⁶.—Pulse 80 on taking the drug; 84 (after five to fifteen minutes); 82 (after twenty minutes); 80 (after twenty-five minutes); 72 (after thirty minutes); 80 (after thirty-five minutes); 76 (after forty to sixty minutes); 80 (after sixty-five and seventy minutes),³⁵¹.—[2380.] Pulse 72, before taking; same (after five to twenty minutes); 78 (after twenty-five and thirty minutes); 80 (after thirty-five to forty-five minutes); 84 (after fifty and fifty-five minutes); decline in force, but was full (after fifty minutes); 72 (after sixty minutes); 68 (after sixty-five minutes); 76 (after seventy minutes); 80 (after seventy-five to eighty-five minutes); 84 (after ninety minutes); 80 (after ninety-five minutes); 76 (after one hundred to one hundred and ten minutes); 72 (after one hundred and fifteen and one hundred and twenty minutes); slow and full, without much tension (second morning),³⁵².—Pulse small and frequent (second night),³⁵³.—Pulse feeble and quick (after two hours),³⁵³.—Pulse scarcely perceptible at the wrist,³⁵³.—Pulse slow and full (after ten hours),³⁶⁰.—Pulse almost imperceptible and also irregular (after three hours),³⁶².—Pulseless at wrists and temples (after two hours),³⁵⁸.

Neck.—Weakness in those muscles which support the head erect (after one hundred minutes),³⁵².

Extremities.—Considerable rigidity of the muscles of the arms and legs (after two hours),³⁶¹.—Power of muscular motion diminished; slight pains were felt in the recti and vasti muscles of the thigh; also pain in the arms and legs when I attempted to move them (after eighty minutes),³⁵².

Superior Extremities.—[2390.] Fingers and nails congested (after two hours),³⁶¹.—Nails greatly congested (after three hours),³⁶².—Thumbs of both hands rigidly extended at right angles (after two hours),³⁶¹.

Generalities.—Finding no relief I lost sixteen ounces of blood; in a short time after I felt much better. The blood which was drawn had an inflammatory crust formed on the surface; it coagulated very firmly, and the edges by retracting within the bowl and turning up, exhibited the cupped appearance; there was a large proportion of serum,³⁵².—He was in normal health, and had fasted eighteen hours before commencing the experiment. He had never smoked tobacco. Twenty-seven pipes, equivalent to 107 grains of the Opium used by the Chinese, were smoked in two hours and three-quarters, at tolerably regular intervals. The third removed the feeling of hunger caused by his long fast, and his pulse rose from 72 to 80. The fourth and fifth caused slight heaviness and desire for sleep, but there was no hesitation in giving correct answers, though he could not guide himself about the room. After the seventh pipe the pulse fell to 70. The twelfth pipe was followed by singing in the ears, and after the thirteenth he laughed heartily, though without any cause that he can remember. Questions asked at this time were answered only after a pause,

and not always correctly. He had for some time ceased to be conscious of his actions. After the twenty-fifth pipe, questions asked in a loud tone were not answered. After the last pipe had been smoked, he remarked, "I do not hear well." Forty minutes later there was a slight return of consciousness, and he said, "I am quite bewildered. May I smoke some more? Is the man with the pipe gone already?" Fifteen minutes later (4.55 P.M.) he was able to go home, and then retired to bed. He woke next morning at 3 A.M., and made a hearty meal, after his fast of thirty-three hours. During the next day he felt as if he had been in a great hollow in his head, as well as a slight headache. The organs of locomotion were first affected, next came sight and hearing, but *Pierre Maclay* is very positive that there were no dreams, hallucinations, or visions of any sort whatever.³⁷³—Spasms of the muscles,³⁵⁷—Twitching of the tendons (after ten hours),³⁶⁰—Violent convulsions, the face, neck, and extremities becoming turgid, livid, and cold,³⁶⁶—Frequent fearful spasms; eyes shut, pupils closely contracted, and breathing stertorous. In the interval between the spasms, he was perfectly limp, and had no control over his extremities, and his head drooped forward or fell backward in a heavy, ungovernable way,³⁶⁴—Relaxation in the muscular system (after one hundred minutes),³⁵²—[2400.] Muscular system entirely flaccid,³⁵⁹—Very much agitated, frequently rising from the bed, and walking with haste across the floor (after two hours),³⁵³—Began to feel languid (after fifty minutes),³⁵²—Weak and languid (second day),³⁵³—Considerable debility (after three hours),³⁵²—Debility was great, and such languor and lassitude that I could scarcely walk across the room (second morning),³⁵²—Tendency to syncope (second day),³⁵²—No sensibility to external impressions,³⁵⁹—Complete anaesthesia and muscular relaxation (in half an hour).³⁷¹

Skin.—Skin dry (after three hours),³⁶¹—[2410.] The skin appears more full, as if elevated or swollen, particularly on the face and hands (after two hours),³⁵²—About noon of the second day erysipelas of the face began to be developed, and extended from the face to the head quite rapidly.³⁶⁸

Sleep.—Drowsiness (after two hours),^{352 366}—While an emetic of Sulphate of zinc was operating, there was a great propensity to sleep, but this was of short duration; she did not sleep till some time in the night ensuing, which was seventeen hours after the Opium was taken; she then slept four hours, after this was much relieved and tranquil for several hours,³⁵³—Profound sleep, from which it could not be aroused (after two hours),³⁵⁸

Fever.—Skin cold (after three hours),³⁶²—Slight rigors were frequent (second day),³⁵²—Face and extremities cold and livid (in half an hour),³⁷¹—Skin cold and moist,³⁷⁰—Extremities cold,^{353 357} etc.—[2420.] Extremities cold and clammy (after one hour and a half),³⁵⁰—Surface hot (after two hours),³⁵⁸—Heat on the skin, particularly of the face (after ten minutes),³⁵¹—Covered with cold clammy sweat (after three hours and a half),³⁵⁷—Slight perspiration on forehead, of a cold, clammy character (after two hours),³⁶¹

OXEODAPHNE.

Oxeodaphne Californica.

Common name, Mountain Laurel of California.

Authority. J. Murray Moore, Month. Hom. Rev., vol. xxii. 1878, p. 485.

One morning I took 5 drops of this tincture (of the leaves), and ex-

perienced no symptoms except a confusion in the head. After six hours 10 drops more were taken, and dizziness, worse on stooping or on moving about, came on, followed by a dull, pressive, fronto-occipital headache. This headache passed off during the night's rest. The urine, etc., were unaffected. Olfaction of this tincture produced on me a most intense headache of a similar nature. I next tried the effect of olfaction on such of my friends as were willing. On almost all occasions the following sensations were produced, immediately after a few brief "sniffs," indeed, in two sensitives one sniff was sufficient: An intense aching, with pressure at the inner angle of the orbit, right or left, generally the latter, but never in both simultaneously, extending through the brain and across the scalp to the base of the occiput. This headache lasted for half an hour to seven hours, was aggravated by light, noise and moving, and relieved by closing the eyes and by perfect quiet.

PALLADIUM.

The element.

Authority. (C. Hering, M.D., North Am. Journ. of Hom., New Ser., vol. ix, 1878, p. 136); **1**, effects of triturating (first day), took, at 11.30 A.M., a teaspoonful of the black water, obtained from washing out the mortar after making the 1st trituration (third day); a swallow of the rinsings at 9 A.M. (fifth day); **2**, Mrs. Margaret C. took 3 drops 4th at 6.30 A.M. (first day), same at 5.45 (second day), 4 drops at 5.30 A.M. (fourth day); after all symptoms had vanished, took 6 glob. of 5th, then of 6th, for three mornings, without experiencing anything more; **2a**, same, took 4 drops at 6 A.M., and another dose before retiring; **3**, Dr. C. G. Raue took a dose of 3d trit. in the morning (first day), second dose (fourth day), third dose in the morning (eighth day); **4**, Mr. Oscar Tietze took 3d trit. at 9.30 A.M., three hours after breakfast; **5**, Dr. Pherson took 1 drop of 3d trit. at 9 A.M.; **6**, Dr. J. R. Coxie made a proving on A. S. C. S., a woman, æt. twenty-nine years, who took a dose of 3d trit. at 10 P.M. (first day), another dose at 7 A.M. and 10 P.M. (second day), sixth dose at 6 A.M. (fourth day), eighth powder in the morning (fifth day); **7**, M. I. C. took 2 grains 3d trit. daily for six days; **8**, S. A. C., æt. ten years, took 2 grains 3d trit. daily for five days; **9**, D. C., æt. fifteen years, took same daily for four days; **10**, E. C. C., æt. thirteen years, took 8 grains 3d trit., within four days, without noticing symptoms; **11**, I. R. C. took 1 grain 3d trit. daily for eight days; **12**, Dr. C. Niedhard, Mrs. N., a nursing mother, took 1 grain 3d trit. between 3 and 7 A.M., two days before she expected her catamenia, which occurred through the period of nursing, and on the second day took a cold bath, which she had not done for a long time.

Mind.—Strong inclination to use forcible language and violent expressions (first day),¹.—Time seems longer to him, as often as he looked to the clock less time had passed than he expected (fifth day),¹.—The child was irritable (first day),¹².—Ill-humored in the evening (fifth day),¹.—She is in a disagreeable mood; feels as if she could not bear or put up with anything, without anything having occurred. The child is the only one with whom she is not impatient (second day),⁶.—Though usually tired in the evening, feels mentally "gone;" is very awkward in speaking English, it is too much trouble, he is tired of it (fourth day),³.

Head.—Very painful dulness in the head, stitches running to and fro in the left side of the head (after half an hour, third day),¹.—Some headache,⁸.—Headache in the morning (sixth day),⁶.—[**10.**] Insupportable

headache (seventh day),⁶.—Frequent headache, as before, inwardly in places the size of an apple or a fist, or dull crooked stitches (eighth to eleventh day),¹.—Noticed no symptoms until 6 p.m. (eleven hours and a half). After a walk, dull heavy pain in left eye and in back part of orbit, lasting one hour, grew severer in spreading over forehead and vertex, then disappeared (first day). Towards 8 o'clock, after a walk, pain in right eye, temple, and around the ear. During dinner pain in right temple near the eye. Slight unpleasant sensation around the left eye (second day),².—Headache, making her irritable and impatient; she feels as if it would do her good if "she could knock somebody's head off," but is able to control herself. Inclined to be pert, and makes faces like a savage (fourth day),⁶.—**Forehead.** Dulness in frontal region, as if a heavy load were lying on the brain; each experiment is accompanied by the feeling as if this load were pushed forward from the occiput to the forehead. (It occupies more the central portion of the brain, the temples are free), (after one hour). In an hour and a half the pain had reached its climax, abated gradually, and all was gone in three hours,³.—Slight fulness in forehead and a sensation as if the brain were being shaken; lasted for thirty-six hours, but was not unpleasant,⁷.—In the afternoon, dull aching and heavy feeling across the forehead and over the eyes (first day). Next morning again heaviness over the eyes and in forehead,¹².—While triturating and soon after a pressure is felt on the right side of the forehead, in the boundary line of the hair covering a spot the size of a finger-tip, and lasting from half an hour to an hour; the sensation is that of a cooling or slightly burning pressure, and is quite new,¹.—A fluttering pain in "cautiousness," right side, between a stinging and pressing, passes off when touching it or fixing the attention upon it (first day),³.—**Temples.** Very marked tension in temples (after four hours),^{2a}.—[20.] Pain in temples and on the vertex, lasting several hours (after four hours),^{2a}.—While walking in the open air, dull pain in the temple and orbit (after one hour and a half),^{2a}.—Light, transient pain in the left of the vertex (after one minute),⁶.—**Vertex and Parietals.** At dinner (after six hours) pain in vertex, a violent pressure, causing a numbness, as from great heat or cold. Between 2 and 3 p.m. the headache became severe, she had to lie down. She felt as if her head were being swung to and fro, from behind forward, not from side to side. Slept one hour, then the headache was better (second day),⁶.—She had a dreamy headache, more in the upper and back part of the head, different from the headache she had had in the last few days (second day),⁶.—Constricting sensation in right side of head, at 12 o'clock, through the entire inner head, left side, at 1 o'clock (fourth day),¹.—In the evening violent sharp headache and neuralgia, left side. Took Nitric acid without relief (seventh day),⁶.—**Occiput.** Dulness in occiput, lasting the entire evening (third day),¹.—**External Head.** For several days two pimples on the scalp behind the left ear, running a slow course (fifth day),¹.—Sensation of roughness on the forehead and slight itching, off and on, for two days,⁸.
Eye.—[30.] Eyes dry and itching, nearly every evening, rubs them, without giving relief (fifth day),¹.—While walking, pain around left eye, extending beyond right eyebrow (after four hours),^{2a}.—Eyelids felt heavy, in the afternoon (first day),¹².—Edges of eyelids feel dry (fourth and fifth days),¹.—Itching of the eyelids, has to rub them, more left than right side (first day),⁴.
Nose.—Slight coryza (third day),¹.—Burning in the nose, as from horse-radish, followed by a watery discharge, in the evening (third day),¹.

Face.—He thinks he notices a marked diminution of growth in his beard (sixth day),¹.—Since several days, and particularly noticeable to-day, is a sensitiveness of the second left upper incisor, and a feeling as if it were a dead foreign body (seventh day),¹.—The right corner of the mouth pains as if sore (fourth day),¹.

Throat.—[40.] Frequently hawks up small solid lumps of phlegm, which he must swallow (eighth to eleventh day),¹.—Peculiar pain in throat when swallowing, as if something were hanging in the region of the hyoid bone, as if breadcrumbs had lodged there; the pain disappears for several minutes, then returns suddenly, while the muscles of the throat are in a passive state, a disagreeable, tickling sensation, as if an awn had lodged in the throat (first day),⁴.—Dryness of fauces and tongue; the tongue looks redder in the middle; no thirst in the morning (fifth day),¹.

Stomach.—A version to beer (eighth to eleventh day),¹.—Several times tasteless eructations between 10 and 11 A.M. (after half an hour),⁴.—Several times eructations, the last one leaving a sourish taste in the mouth (soon),⁶.—Violent pain, like the digging with the end of a stick, in right side, two or three inches to the right of the epigastrium, where the eighth and ninth ribs ascend to the sternum; then pressing pain under the ribs, left side (third day),¹.

Abdomen.—Pain and soreness in the liver (seventh day),⁶.—Frequent passage of small quantities of odorless flatus (third day),¹.—Frequent passages of unusually small and short flatus (sixth day),¹.—[50.] Bellyache before rising (third day),².—Pain in the abdomen, particularly in the region of the spleen (third day),⁶.—Soon after rising, between 6 and 7 A.M., most violent, sharp, knifelike pains in the lower portion of the abdomen; she seldom had anything similar. It was so severe that she could not hold the child, but passed off after a passage. Two slight attacks after breakfast, with inclination to stool; nothing passed, however, but wind (seventh day),⁶.—Is troubled at times with symptoms of tapeworm. Palladium seemed to have a special effect upon it. Sensation as if the abdomen were enlarging, very soon. Several stitches in the left side, in the region of the hip-bone, but more inward; in the intervals a peculiar pain, as if air-bubbles pressed forcibly upward through the intestines. The stitches and the peculiar feeling in the intestines returned, and extended to the right side. After 11 A.M. transient pain in the lower portion of the intestines, on the right side, as if the testicles were squeezed. About an hour later, after a meal, the above-mentioned stitches returned, but were of short duration. They returned several times, first on the left side, then less severe on the right. Often but single stitches, or, more accurately, bites, as if an animal were snapping and tearing off little bits from the inside. Flatulency and distension of the abdomen. Sensation as if the intestines were strangulated and twisted in different directions, more in the upper than lower portion. Frequent passage of flatus. Painful stitches in the left side, followed by cutting, more right than left side, almost unbearable, lasting some minutes; returns after a short interval and lasts longer (first day). Stitches in the abdomen (second day). Unpleasant sensation in the groins, painful to pressure, feeling as if emptied of viscera (third day). The prover had no more symptoms of tapeworm for more than a year afterwards,⁴.—Aching in the left groin at every step (seventh day),³.

Rectum and Anus.—At the approach of a stool, dull stitches, or dull aching twitches, in the left side of the rectum. The dull stitches return in the evening (tenth day),³.—Pain in rectum, with a retained stool,

no urging to stool; pain increased till 1 P.M., just before dinner, when a soft stool occurred and the pain ceased (third day).¹—After a stool, with much pressing, sense of fullness in the anus, in the evening (fifth day).¹

Stool.—(Of a constipated habit for years, the stools now became soft, and remained so until after the proving, when again constipation as before).²—First a hard, then a mushy, thin stool, with protrusion of the anus; at 10 P.M. (first day).¹—[80.] Slight inclination to stool, as if diarrhoea would set in, while walking on the street, towards evening (third day).¹—Thin stool, with quick and violent urging, as if diarrhoea would set in (fourth day).¹—All stools but one on the fourth day, since the proving commenced, occurred in the afternoon or evening (fifth day).¹—Frequent stools, followed by slight colic (first day).¹²—Stool more frequent and softer. Continues two days after stopping.⁹—Stool no longer daily, but every other day (eighth day).³

Urinary Organs.—Pressing pain in region of left kidney, as if the urine had been retained too long; worse while sitting; pressure does not aggravate, but rather relieves it, but it gets worse afterwards. Frequent urging to urinate; aching in the bladder. Pain in kidney very marked towards evening (fourth day). While sitting, still some pain in left kidney (fifth day).³—Pressing in the bladder, as if it were full of urine (first day).⁴—Stitches through the bladder and painful weakness (tenth day).³—Stitches through the urethra to the glans (first day).⁴—[70.] Increased urging to urinate, he passes more, but not often, in the evening (third day).¹—Frequent urination; the bladder feels full, and yet but little urine passes (thirteenth day).³—Frequent urination during the day; frequent urging and scanty discharge (first day). Copious urination (second day). Urging to urinate and scanty discharge remain (third day).⁴

Sexual Organs.—Erections every morning, but none in the evening and at night, even none from excitation (eighth to eleventh day).¹—Pain in uterus or region of the bladder (fifth day).⁶—In the evening she went to church, and walked home rapidly, when the menses reappeared, as they had done often after exertion; it was the seventh day since they had commenced, and since thirty-six hours there had been nothing visible. The occurrence of the menstrual flow may be attributed to the medicine, for it is of a different character than that which usually occurs after exertion, it is more like clear blood (second day). Menses continue, but less copious and watery (fourth day).⁶—The proving was commenced a day after her catamenia had ceased; the following menstrual period came several days sooner.²

Chest.—After sitting awhile, "congestion" in right side of chest (after four hours).^{2a}—Aching along the edge of the ribs and the diaphragm (fourth day).³—On bending the body forward, while sitting, flying stitches from the middle of the chest in the direction of both shoulders (thirteenth day).³—[80.] Pressing in the suprasternal fossa (first day).⁴—Stitches in right chest in the region of the nipple, running deep in; worse from taking a deep breath, disappearing while walking in the open air (seventh day).³—Fleeting stitches on the inner side of the collar-bone, on entering the room, after walking in the open air (seventh day).³

Heart.—Frequent painful pressure in the cardiac region, and low down in the left chest, occurring at intervals (fourth day).¹—At 2 A.M., pain in the cardiac region (fifth night).⁶

Back.—Pain in left trapezius muscle, as from lying on it too long; worse when turning the head to the left (fifth day).³

Neck and Back.—Sensation as if he were getting a stiff neck, especially on both sides, above the first dorsal vertebræ; immediately after in the lower portion of the scapula, and at the same elevation in the spinal column, a pressing pain as if a dull object were being slowly pressed against the spine. This is followed by a repetition of the stiffness in neck (first day),⁴.—Very painful contraction of several muscles on the right side of the neck, felt several times since the proving commenced (seventh day),¹.—Painful drawing in the neck and shoulders and down the left arm, of short duration (first day),³.—Weak back in the morning (sixth day),⁶.—[90.] In the afternoon dull pressing backache, as from sitting up stiffly too long (eighth day),⁸.—Sat three hours in church, in the evening, listening to a tedious sermon and dull exercises, which gave her a pain in the back, but no headache. This, another time, would have failed to come (fifth day),⁶.—During the night pain in the back across the hips, perhaps because the child was restless. She was anxious about it, but not impatient (fifth night),⁶.

Extremities.—For about an hour aching through the limbs, as if beaten, with a feeling as if the menses would appear, in the afternoon; both symptoms diminished in the evening, without entirely disappearing (first day). The menses did not appear,¹².

Superior Extremities.—As if beaten in the muscles of both arms and shoulders to the elbows (second day),¹².—Painful drawing in the right shoulder, on returning to the room, after walking in the open air (seventh day),³.—Sensation in left arm as if it were "going to sleep" (third day),¹.—Rheumatic pains in the right shoulder, in the evening (eighth day),³.—A few lightning-like stitches in the right shoulder, almost making him scream (seventh day),³.—Tickling in the right shoulder (after ten minutes),⁶.—[100.] Left arm still feels as if "gone to sleep," at 11 A.M., lasts half an hour (fourth day),¹.—The numbness in arm passed off in the evening (fourth day),¹.—The right arm and hand often get numb in the night (eighth to eleventh day),¹.—Slight numbness in the right forearm, extending to the fingers, from 3 P.M., seventh day, until evening of the eleventh,¹¹.—Drawing pain in left forearm, as if lame, more on the radial side, disappearing in the open air (seventh day),³.—Sudden twitching in the right wrist and metacarpal bones (third day),¹.—Pain in right wrist, extending into the forearm (after four hours),^{2a}.—Severe pain again deep in the left hand, burning and boring, as if shattered; it wakes him (second night),¹.—While sitting still, constant painless twitching, which crooks the fingers, particularly the index finger, until 12 o'clock (fourth day),¹.—Short, violent, stinging pains in the metacarpal bones and thumb of the left hand (fifth day),¹.—[110.] Sudden stinging pain in the metacarpal bone of the middle finger on the left hand, at noon (first day),¹.—Stitches in the fingers, first left then right (first day),⁴.

Inferior Extremities.—Dull gnawing pain in left hip (after one hour and a half),^{2a}.—Twitching pain in left hip-joint, during the morning (fifth day),⁶.—On the following days she has a sensation as if the articulating ends of the thigh-bones expanded or were pressed out of their sockets, especially on the left side; she did not notice it while walking, but when pressing down as if for a stool,^{2a}.—Pain above the left knee, extending from there into the chest, in the morning (sixth day),⁶.—Tensive pain in right knee, of short duration (first day),⁴.—Small stitches above the knee, like flea-bites (first day),⁴.—Tearing in the legs, isolated short stitches, as if proceeding from little pimples (first day),⁴.

Generalities.—Very tired in the evening (thirteenth day),³.—[120.] Very tired when walking, he reels on coming into the room, in the evening (third day),¹.—Feet heavy, tired in the limbs, inert, and undecided, in the morning (third day),¹.—Aversion to making any exertion. She feels as after taking Mercury and afterwards Magnesia, as she has sometimes done, but this may have been caused by the exertion (seventh day),⁶.—While walking it seems to him as if he had grown much taller; the feeling recurs repeatedly. The symptom did not return later either in lying down or walking (third day),¹.—Toward morning, somewhere in the left side (forgotten because it disappeared on turning), a peculiar pain never experienced before (second night),¹.—Neuralgic pains in the body, here and there (first day),⁴.—Bellyache before rising, afterwards pain in right temple. At 7.30, while walking, rheumatic pain in right hip. At 9.15 pain in right thumb, then in forefinger, first in right, then in left temple, in right shoulder and arm, then again in right temple. Some pain in small of back, extending over the right thigh, then pain in right wrist, in left hip, right hand, and right lower jaw. After a walk, at noon, pain in right temple and right arm. The pains change place so quickly, and at times are so transient, they are hard to describe. The pain returns oftenest to the temple, and remains there longer than anywhere else (third day),².—At 2.30 p.m., violent throbbing throughout the body, preventing sleep for a long time (after seven hours and a half, second day),⁶.—Feels worse in the afternoon (third day),¹.—Motion seemed to aggravate all symptoms (fourth day),².—[130.] Nearly all symptoms appeared towards evening, or were more perceptible then (thirteenth day),³.

Skin.—Small pimples on various places, particularly back of the left ear, painfully sore (sixth day),¹.—Itching pimples in the whiskers, left side, in the evening (seventh day),¹.—In the third week a slowly ripening pimple above the tip of the nose, which bled for a long time, after the pus was squeezed out,¹.—A deep-seated pimple on the right cheek near the wing of the nose, red, not painful (does not come to a head), (seventh day),³.—Pimple on the back portion of the right zygoma (eleventh day); one in the same place on the left zygoma (twelfth day),³.—A pimple on the right side of the neck, which has been there several days, begins to itch and burn. A pimple beneath the right eyebrow, near the canthus, burns and bites when touched (eighth day),³.—A vesicle on the inside of the under lip near the left corner (sixth day),³.—Several small vesicles, clear as water, on the edge of the lower lids (seventh day),¹.—Between 2 and 3 p.m., something similar to a fleabite on the right side above the lip, also on left nostril, and on various places on the body and head (after seven hours, second day),⁶.—[140.] Felt a burning and itching on a small spot on the right side of the face, in the morning (third day),¹.—Burning and itching on a spot below the point of the right shoulderblade, also on various places on the right thigh and leg (fifth day),¹.—Burning and itching in a small spot in the left groin, in the evening (third day),¹.—Crawling, as of fleas, and itching on various parts of the body, on the back, arms, abdomen, thighs, and ankles,⁹.—At 7 a.m. crawling over the entire back and thighs, as from fleas, accompanied by itching; disappears when scratching, but soon reappears in a neighboring place (second day). With thirty-six hours it had become very troublesome, lasted during the entire proving and two days after stopping the drug. One day observed small elevations here and there like a nettlerash, red on a base whiter than the skin,⁷.—Itching over the whole body, while undressing, in the evening (sixth day),¹.—At 1 a.m.,

itching above the left zygoma, about the eye and nostril, later also in right side of face, near the eye, and on the side of the head (third day),⁶.—Itching on the inner side of the left ankle, on the inner side of the right thigh, on the right elbow, and more on the back of the neck, in the left eyebrow, and in the left arm (after ten minutes),⁶.

Sleep.—Drowsy and lazy in the evening (fifth day). The drowsiness and fatigue return later every evening; he is very much exhausted, disinclined to work; he lies down and goes to sleep if he can (sixth day),¹.—Unusually sleepy in the evening, while riding in the carriage and seeing patients, not after coming home (second day),¹.—[150.] At 2 p.m. she lies down, falls asleep, and wakes with a start. The head, which ached in the forenoon, is better, and the hip no longer pains. She slept another half hour before dusk, which completely relieved the headache (fifth day),⁶.—At 3 p.m. overpowering sleepiness, lasting for one hour, passes off with pain in left temple. With this the symptoms closed (fourth day),².—For nearly a week he has had the same kind of a dream every night, he always remembers it in the morning, of houses, buildings, in which he was or beside which he stood, often as if he stood at a window, walked up and down staircases, through various apartments, etc. (seventh day),¹.

PERSICA.

Authority. 4, Dr. Demeures, Journ. de la Soc. Gall., vol. iv, p. 108, effects of a drop of the tincture.

The gums are swollen and bleed on the least suction, without pain,⁴.—A quarter of an hour afterwards, while lying on the grass, pain in the cartilage of the last true rib, near the sternum, felt especially during inspiration, less on touching, like the pain of a blow,⁴.—[40.] Immediately, numbness of the fingers,⁴.—Twenty-four hours after, numbness of the fingers when writing; the eyes are tired and are filled with tears when reading,⁴.—Pain in the right thumb, at the extremity of the great flexor muscle. This pain is not felt when touching the part, nor when writing,⁴.

PETROLEUM.

Authorities. 23, G. W. Haile, M.D., Cincin. Journ. of Med., May, 1867, p. 300, Mary —, aged eighteen months, drank an indefinite quantity; 24, Dr. O. Lassar, Virchow's Archiv, Jan. 1878 (Lond. Med. Rec., 1878, p. 163), effects of inunction.

Rolling its eyes up occasionally (after fifteen minutes),²³.—Pupils slightly contracted (after fifteen minutes),²³.—Breath smelt very strongly of the oil (after fifteen minutes),²³.—A kind of spasmodic cough (after fifteen minutes),²³.—Very hard convulsion (soon),²³.—The urine had been highly albuminous, and contained "hyalin and granular cylinders." At the necropsy, the body was extremely œdematous, and the epidermis in places was raised in little blebs; dissection showed dropsy of the cavities and œdema of the lungs, but no lesion of any organ to account for the dropsy, the kidneys being perfectly normal in all respects. "The most scrupulous histological investigation failed to find a trace of interstitial growth, proliferation of nuclei, amyloid degeneration, or more than traces of fatty degeneration of the epithelium." On inquiry, it turned out that this man

had dated the commencement of his illness from an extensive inunction of his body with Petroleum, which about four months before his death, he had employed as a means of relieving himself from scabies. He used the Petroleum for four days, and a week elapsed before he noticed swelling of the feet, which, rapidly increasing, spread over the abdomen and thorax; in the course of a fortnight it disappeared, but returned after eight days, and persisted up till his death. While in hospital, the radial pulse was noted to be small, empty, and of low tension; the blood-corpuscles were few, but their relative proportions were normal. Temperature was normal. Histological examination of the skin showed localized areas of inflammation; along the veins and lymphatics a small-celled growth existed, and in all the layers of the cutis there was a widely distributed nuclear proliferation,²⁴.—Much inclined to sleep (after fifteen minutes),²⁵.

PHOSPHORUS.

Authorities. **233**, Brit. Med. Journ., 1877 (2), p. 422, a young woman, in the seventh month of pregnancy, took a small quantity of Phos. paste several times; **234**, W. T. Martin, M.D., *ibid.*, 1878 (1), p. 478, fatal poisoning of a man, aged thirty-one years, by the paste; **235**, F. W. Willmore, *ibid.*, p. 564, two girls, aged sixteen and fourteen years, took between them about $\frac{1}{2}$ ounce of the paste.

Head.—Severe frontal headache,²³⁵.

Eye.—Eyelids closed, pupils dilated and insensible to light,²³⁴.

Mouth.—Tongue coated with blackish fur,²³⁴.—The breath and vomited matters smelt strongly of the poison,²³⁵.

Throat.—Swallowing attended with difficulty and pain,²³⁵.

Stomach.—Vomiting,²³⁵.—She suffered from severe pain and vomiting, and died in about forty-eight hours, having been previously delivered of a stillborn child,²³³.

Abdomen.—Abdomen tympanitic,²³⁴.—Whole abdominal region greatly distended, painful, and tender,²³⁵.—[3930.] Abdomen and right hypochondrium slightly painful on pressure; area of hepatic dullness not increased, diminished if anything,²³⁴.

Stool.—Bowels constipated,²³⁴.

Respiratory Organs.—Respiration 48, without stertor,²³⁴.

Pulse.—Pulse 88, weak,²³⁴.—Pulse thready and easily compressed, in the eldest girl 135, in the younger 98,²³⁵.

Generalities.—Convulsions (eldest),²³⁵.—Weak, anxious, and depressed,²³⁴.

Skin.—Skin and conjunctivæ of a distinct yellow tinge,^{234 235}.

Sleep.—Drowsiness (eldest),²³⁵.—Appeared drowsy but complained of sleeplessness,²³⁴.

PICROTOXIN.

Picrotoxinic acid, $C_{12}H_{14}O_5$.

Obtained from the fruit of *Cocculus*.

Authority. John H. Henry, M.D., *Amer. Obs.*, vol. xv, 1878, p. 16, most of the symptoms were produced on myself by taking the P. for five days.

Mind.—Sad thoughts, desires to sleep.

Stomach.—Pressure in stomach, without coated tongue and eructations; dyspepsia, with eructations, with pain in the pit of the stomach; frequent eructations; nausea, with a tendency to faint; inclination to vomit, with headache.

Abdomen.—It caused flatulence, with fetid diarrhœa, followed by tenesmus, painful and continued; seems to extend all over the bowels; fainting, violent, subacute irritation of the intestinal lining membrane.—Pain in the bowels as if bruised; soreness in the inguinal ring, left side, as if the bowels would protrude.—I became alarmed, and resorted to Camphor, Chloroform, and Opium combined, to give relief to the violent sore pains in the bowels, attended with diarrhœa and dysentery, with large and frequent discharges of urine.

Urinary Organs.—A large quantity of clear urine passes as many as twelve times a day.

Respiratory Organs.—A feeling as if one wanted to get more breath, impeding respiration.

Back.—The back feels bruised.—Drawing pain in the back.—Drawing in the left side of the back.

Superior Extremities.—Dragging sensation of the right arm.—Pains in left arm, forearm, runs up into the shoulder.

Inferior Extremities.—The lower limbs have a tendency to draw backwards with the back, giving great relief to the extremities.—The lower extremities feel bruised and paralyzed.—Constrictive painless sensation in the lower extremities.—Cramp pain in the lower extremities.—A paralytic feeling in the left lower extremity.—Pains in the left outer ankle.

. PIPER NIGRUM.

Authority. 2, Dr. Houat, *Nouvelles Données de Mat. Med.*

(We add these symptoms by Houat to complete his work, and for purposes of criticism.—T. F. A.)

Mind.—Hot-headed, irascible, and often gay,².—Disposition to excesses of all sorts,².—Amorous thoughts and desires, with hypochondria,².—Hypochondriac, with fear of being poisoned,².

Head.—Heaviness and congestion of the cerebellum, with paleness of the face,².—Rushing (*bouillonnements*, literally boiling up) and congestion of blood to the head, with burning and throbbing pains and prickings,².—Sensation of emptiness in the brain, or of fulness, as of a great deal of fluid,².—Attacks of numbness in the brain, producing a sort of sleep and swoon,².—Sensation of pressure on the head, and as if the bones of the cranium and face rested on the lower jaw,².—Neuralgic pains running through the whole head at every change of the temperature,².—Violent headache; it feels as if it would burst at the vertex,².—Feeling of fluctuation and oscillation of the brain when moving,².—Pressing pains at the temples, as if they would be broken in,².

Eye.—The eyes inflamed and burning, with a sensation of cold on the eyelids,².—Eyelids ulcerated and bleared,².—Lachrymation and photophobia,².—Dimness of sight and vertigo, with cephalalgia, nausea, and vomiting,².

Nose.—Frequent sneezing, epistaxis,².—Dry and fluent coryza,².—Dryness and burning in the nostrils; the nostrils are stopped up,².—Pressure on the bones of the nose as if they were being crushed,².

Face.—Red and burning face,².—Drawing faceache, with a sensation as if all the muscles and bones were ranging themselves one upon the other,².—Convulsive closure of the jaws,².

Mouth.—Caries and decay of a tooth,².—Violent toothache, particularly in the warmth and evening,².—Eruption of little burning vesicles on the margin of the tongue,².—Painful heavy tongue; impeded speech,².—A whitish coating on the middle of the tongue,².—Burning dryness of the mouth and throat,².—Heat and dryness of the palate, which seemed to be burned; likewise of the tongue,².

Throat.—Constant need of expectorating much mucus, which forms in the throat,².—Burning in the throat, with a sensation of stiffness, as if it were an iron tube,².—Burning pains on the tonsils, with sensation as if they were being pierced,².—Paralysis of the muscles of the throat; one cries, but is not able to articulate intelligibly,².

Stomach.—Continual unquenchable thirst,².—Vomiting, accompanied by great exertion; it seems as if the whole stomach itself were to be vomited,².—Sensation of heat and dryness in the stomach,².—Cramps and drawing in the stomach, with a desire for coarse and extravagant food,².—Gastric discomfort,².

Abdomen.—Burning and lancinating pains in the liver, as if there were a tumor,².—Disposition of the abdomen to obesity,².—Swollen, hard, and burning abdomen,².—Tympanitis of the abdomen, with a sensation as if everything in it were in ebullition,².—Borborygmus in the intestines, with much flatus, also in the stomach,².—Inflammation of the intestines, with great thirst,².—Heaviness in the intestines, with a great deal of flatulency,².—Colic and cramps in the intestines; sensation as if they would burst,².—A very painful sensation of restlessness and anxiety in the intestines,².—Sensation of a foreign round body, which rises even to the stomach, with tearing pains in the intestines,².—Pains as from an abscess in the intestines,².—When he stirs, electric discharges seem to be produced in the intestines,².—Burning in the loins and kidneys, with contractive movements,².

Rectum and Anus.—Inflammation of the rectum, the anus swollen and burning; great hesitation to go to stool on account of the difficult and painful defecation,².—Fissures at the anus,².—Large and flowing hæmorrhoids,².

Stool.—Long-lasting constipation, then involuntary thin stools,².

Urinary Organs.—Full and swollen bladder, with frequent inclination to urinate without success,².—Burning pains in the bladder, as if there were a pan of coals,².—Blennorrhagic discharge, greenish, and of an offensive odor,².—Burning in the glans, and in the urethra,².—Difficulty of urinating, with urine generally saturated, turbid, brownish,².—Diabetic urine,².—Hæmaturia,².—Urine containing sand,².

Sexual Organs.—Priapism atrocious,².—Inflammation and swelling of the penis, with priapism and burning pains,².—Pains of excoriation at the penis, as from an excess of sexual indulgences,².—Burning and pricking of the glans,².—Strong ejaculation, or almost none, and very difficult,².—Congestion of blood in the ovaries and uterus, with pricking and lancinating pains,².—Contraction of the uterus, with a sensation as if something strove to penetrate into it,².—Burning and distending pains in the uterus,².—Menses make their appearance with difficulty; retarded menstruation,².—Menses capricious, irregular, with colic and blackish blood,².

Respiratory Organs.—Ulcerations and false membranes thick

and deep in the larynx,².—Voice low, deep, and sometimes rough,².—Low voice, which cannot be understood,².—Hoarseness, with coughing and constant snuffing,².—Incessant coughing, with sensation of ulceration in the bronchia,².—Severe coughing, especially at evening, and when going to sleep,².—Violent cough, occasionally spitting of blood,².—Croupish cough, with pains of excoriation in the trachea,².—Brisk, hollow, resounding cough, more so at evening and morning, with a whitish and sometimes grayish expectoration,².—Dyspnœa and attacks of suffocation,².

Chest.—Disposition for obesity of the chest,².—Painful spots on various parts of the chest, aggravated by coughing, respiration, and motion,².—At each coughing spell, it seems as if the chest would be torn and he would spit blood,².—Burning and lancinating pains in the entire chest,².—Sensation of heat and dryness in chest,².—Burning and swollen breast,².—Great flow of milk,².

Heart.—Sensation as if the heart were surrounded with water,².—Frequent palpitation of the heart,².

Extremities.—Inflammation and swelling of the joints,².

Generalities.—Bones easily fractured,².—The motion of a carriage deafens and produces spasms,².—Attacks of spasms, with tetanic stiffness of the limbs,².—Great weakness of the whole body,².—Aggravation of the sufferings from motion, in the evening, and in damp weather,².

Skin.—Crusty ulcers on the concha of the ears,².—Large pustules, leaving marks on the face,².—Eczema on the lips,².—Dartrous eruption and ulceration, principally at the left mamma,².—Very tender skin,².—Insupportable itching through the whole body, aggravated by scratching, and by heat and motion,².

Sleep.—Irresistible desire to sleep, especially in the evening and after eating,².—Great sleepiness, particularly in the evening,².—Lethargic sleep,².—Awaking at night without being able to sleep again,².—Sleep, with nightmare and frightful dreams,².

Fever.—Dryness and coldness of the skin, or heat with biting dryness,².—Heat on the forehead, with heaviness of the head and vertigo; necessity of a support to prevent falling,².—Cold sweat, with great heat through the whole body,².—Sweat, which seems to corrode the skin,².

PIX LIQUIDA.

A product of dry distillation of various coniferous woods.

Authorities. 1, H. and J. Slight, *Lancet*, 1832-3 (2), p. 598, a man, aged thirty-two years, drank about a gill of the oil of tar, recovery; 2, Dr. Buckley, Practitioner (*Brown-Sequard's Archives of Sci. and Pract. Med.*, No. 2, 1873), effects which sometimes follow local application in skin diseases.

Fulness and pain in the head,².—Pain in the stomach,².—Constant vomiting (after seven hours and a half),¹.—Vomiting of a blackish fluid,².—Excessive pains in bowels and loins (after seven hours and a half),¹.—Ardor urinæ (second day),¹.—Dark-colored urine,².—Dark-colored fecal evacuations,².—Great exhaustion (after seven hours and a half),¹.—It may produce an acute eczema, some skins not tolerating the substance at all; while in others an acne is developed from closure and irritation of the sebaceous orifices,².—Occasionally high fever,².

PLUMBUM.

Authorities. 586, John F. Luck, M.D., Med. Record, vol. xiv, 1878, p. 158, J. F., æt. fifty-one years, after a protracted debauch, took 3 ounces Acetate in water; 587, Dr. M. Bernhardt, Berlin, Klin. Woch., June, 1878 (Lond. Med. Rec., July, 1878, p. 281), a case of lead palsy (cause not given); 588, same, *ibid.*, J. W., æt. twenty-nine years, has been a painter sixteen years.

After sleeping three hours he awoke feeling tolerably well; was about the village during the day, and only suffered from slight colic. I was summoned twenty-four hours after he had taken the poison and found him pale, anxious; pulse 58, feeble; temperature 97° F.; abdomen tense and retracted. He had vomited three pints of fluid matter containing blood and shreds of mucus; ejection black from change of Acetate to lead sulphide; six hours after vomiting, persistent, copious, without straining; prostration extreme; hands and feet numb; calves of legs cramped; pulse 50; no dejection; no urine voided since taking the Lead; abdomen hard and nodulated; colic pains constant, particularly severe and burning at pit of stomach; general tremor of body; unable to stand on account of vertigo; urgent thirst; delirious. Four hours after (after *Ol. ricini*, *Ol. tiglii*, etc.) bowels had moved freely, dejected matter similar to that vomited, plus small quantity of scybala. Four hours later had passed 4 ounces of highly-colored urine; blue line distinct along edge of gums; greatly prostrated; vigilant; delirious (potomania?), ⁵⁸⁶—A. T., æt. forty-nine years, is a ruddy, healthy-looking woman, and, excepting the paralysis of her left arm, considers herself well. The smallness and flatness of the left shoulder as compared with the right are very striking; the acromion projects forwards, and between it and the head of the humerus there is a furrow in which the index finger can be laid; the entire left upper arm is thinner than the right, especially on the flexor aspect; the forearm is overextended on the humerus and cannot be flexed by any effort of the patient. If you tell her to bend her left arm, she swings the whole limb upwards over her shoulder, and then the forearm falls of its own weight on the humerus. The arm bent by this means can be actively extended. If we partially bend the forearm upon the upper arm, and then ask the patient to continue the movement, by a great exertion she is able to do so, but this is effected by the flexor carpi ulnaris and flexor digitorum profundis, which can be seen and felt to contract. Supination of the left forearm is not possible; if the arm be passively supinated pronation is readily effected. The movements of the left hand and fingers are in every respect free; the hand is a little curved and the skin bluish red, but no œdema or eruption is present; there is no atrophy of the interosseous or thenar muscles; the arm can be raised from the shoulder in spite of the visible atrophy, and the clavicular fibres of the deltoid can be seen to contract; adduction, internal and external rotation, and drawing of the arm are all well performed, although the last is not quite so perfect as on the right side; the right arm is quite normal, except a distinct atrophy of the ulnar side of the extensor aspect of the forearm, which is associated with inability to completely extend the fingers, the basal phalanges of the thumb and index finger being alone perfectly extended, the remainder persisting in a state of half flexion in spite of the strongest voluntary efforts, the middle and unguis phalanges of the same fingers being, however, as perfectly

flexed and extended as in health. She feels a certain subjective sense of weight in the left arm. Electrical examination gives the following: In the right arm the muscles all react well to direct and indirect stimulation, except the extensor communis digitorum, which does not extend the three fingers above mentioned; the extensor carpi radialis reacts more feebly than normal, although its contour is prominent. In the left arm the deltoid reacts only near its origin from the clavicle; the biceps and both supinators are absolutely without reaction; it is questionable whether or not some intact fibres of the long supinator exist in the upper arm where it is covered with fat. All the other muscles of the arm, forearm, and hand react to both direct and indirect stimulation. Placing the electrode at the point mentioned by Erb, as that from which it is possible to stimulate both the biceps and long supinator together (at the exit of the fifth and sixth cervical nerves between the scapuli), gives a marked reaction of the muscles in question on the right side, but remains without effect even, with much stronger currents on the left. With the anode of the constant current on the neck, and the cathode on the right deltoid, a feeble contraction occurs with twenty-two cells, while on the left side thirty cells produce only a quick twitching of the clavicular fibres, the bulk of the muscles remaining unexcited; with thirty-three cells the remainder of the left deltoid reacts. The left biceps does not contract, the right contracts with thirteen cells. By stimulating the right radial nerve with twenty cells, there is short quick movement in the index finger and thumb. The muscular fibres of the extensor communis, from the three outer fingers of the right hand, do not react to direct or indirect stimulation. All the muscles of the left arm, innervated by the radial nerve, contract with twenty cells, except the supinators. We have in the case before us paralysis and atrophy of the deltoid, the biceps, and brachialis anticus, as well as of both supinators on the *left* side, and a part of the fibres of the extensor communis digitorum of the *right* side.⁵⁸⁷—After several attacks of colic one night, without any affection of the sensorium, paralysis of both hands and fingers supervened; *the shoulders and the upper arms remained freely movable*; extension of the forearm on both sides was free; equally flexion of the forearm on the upper arm; the first interosseous space was not only sunken, but there was decided atrophy of the ball of the thumb, and on both sides the interosseous spaces were sunken, and the interosseous muscles were atrophied and incapable of function, so that the lateral movements of the fingers and the extension of the middle and ungual phalanges were not possible; the hypothenar eminences were also diminished in both hands; there was also paralysis of the muscles supplied by the radial nerves on both sides, and of some of those supplied by the median and ulnar nerves. But these undoubtedly interesting phenomena pass into the background when we consider the result of electrical exploration. With the induced current of the muscles supplied by the radial nerve on the left (the less affected) side, only the extensor carpi ulnaris and supinator longus react, but very feebly; all the other muscles remain unaffected, and these by direct and indirect stimulation. On the other hand, the muscles supplied by the ulnar and median nerves on the left side contract very forcibly to both direct and indirect stimulation, but the adduction of the interosseous and thenar muscles was very feeble, or almost *nil*. The same, only more marked in failure of reaction to the induced current, is the case on the right side; even with the strongest currents the supinator longus, a muscle which usually remains intact in lead-poisoning, scarcely displays its con-

tour, and in the feeblest outline the tendons of the extensor carpi radialis longus et brevis display themselves, but without producing any corresponding movements. *It is remarkable that muscles which have their functions quite unimpaired, and are used at will by the patient, and of the action of which he has never complained, should react either not at all, or only in the smallest degree to the strongest induced currents.* This is the case for both the deltoids (except the clavicular portion), for the biceps and brachialis internus. With the constant current the deltoid, biceps, supinator longus, and the extensors of the hands and fingers of both sides, with strong currents (thirty to forty elements), give only fibrillar twitchings; in fact we have in the paralyzed, as well as the unparalyzed muscles, the most marked degenerative reaction,⁶⁸⁸.

PODOPHYLLUM.

Authority. 20, D. Webster, M.D., Med. Record, June, 1877, p. 357, Thomas C., æt. seventeen years, while powdering the resin got some in his face and eyes.

The next morning he first noticed that his face and eyes were red, and the skin about them discolored. The discoloration extended over the whole of his face, his forehead, and the front part of his neck during the day, and the following night his eyes became so painful as to prevent sleep. On the following day all the parts which had been exposed to contact with the powder were of a yellowish-red color, but not swollen to an appreciable extent. The ocular conjunctivæ were much injected, the palpebræ only slightly, the pupils small, the eyes painful and sensitive to light,²⁰.

PYRUS.

Pyrus Americana, L.

Natural order, Rosaceæ.

Common name, Mountain ash.

Authority. H. P. Gatchell, M.D., Northwestern Annalist (Amer. Hom. Obs., vol. xv, 1878, p. 520), the tincture of the bark was used, several drops in a cup of water, and repeated doses of a teaspoonful of the water were taken; 1, effects on myself; 2, effects on a married lady; 3, effects on a lad; 4, effects on another lad.

Some irritation of the eyes; no other symptoms!—Feels like crying; feels as if the knees are immensely swollen, as if the toes the same; knees and toes ache; feels constricted around the waist, obliged to loosen the clothes at once; headache begins over the eyes; left side of head aches terribly, like a toothache; aches everywhere, in every joint; left great toe feels as if torn from its socket; sense of prolapsus of womb, bearing down and pressing out as if swollen, and burning all over; pains in the head knifelike; all the pain intense, acute; thinks the conditions that of inflammatory rheumatism; as if the lungs were congested, especially at the base; can hardly breathe, as if cold water in stomach; thinks mucus accumulated in the cold stomach; craves hot teas; headache extends to the right side; head feels as if it would burst; great weight on top of head; toes burn; aching at heart; twinging pains in arms, legs, and toes; as if rectum were shrunken, dried up; bearing-down pains, and pressing out like labor-pains; feels gloomy and discouraged, but can't cry; very cold, shivers

internally; thinks she must look blue; cold creeping all over; pain in knees subsides, and is succeeded by pain as in the tendons and along the calves. "Oh, such a drawing pain, cutting and drawing also, like that in the head." Feels resolute, as if full of a gloomy determination; thinks meat bad for her, would not digest; needs soft, mild food; irritation of bladder and urethra; feels as if prolapsus of bladder; dreads to move, especially on account of the joints; sensitive to cold; stomach still feels as if full of cold water; sick feeling under right scapula; thinks bile deficient; shooting pains in forehead; feeling as if coldness in stomach extends up under sternum; same feeling in the gullet; excessive aching of bones of toes, seems unendurable; thinks the stomach very weak, as if it would digest nothing; thinks it is dry and wrinkled; hypochondriac not nervous; feels lazy, as if she would like to lie in bed and be waited on; selfish; headache penetrating in temples; thinks she is clairvoyant; can read character and understand motions; can see into herself; thinks the blood dark blue; feels pains drawing, rending along posterior aspect of thighs and down to toes; left side most affected; feels as if the left leg were drawn up and would never straighten again; pains seems to move in meandering lines; seems to be able to go out of herself for a short distance to walk around and return into the body; thinks she is looking down upon her own body; seems to her that the fundus of the stomach is depressed in the abdomen, as if on fire at the pyloric end of stomach; thinks there is a red spot there looking like raw beef, as if the stomach were burnt up with raw whiskey; exclaims in a plaintive tone, "Don't get out of patience with me" (of which I had given no indications); cries, feels babyish apprehension; fears something terrible is about to occur; very chilly; can't talk loud; voice gone; she feels weak, as if about to die; moans and groans; calls for help; oppression about the heart, as if it had stopped beating, as if going into convulsions; feels as in a spasm of the heart, tetanic, as if the blood were too thick to circulate; thinks she would have died but for the Camphor I gave her; felt as she did when near dying of hæmorrhage; brain is active, intellect clear, thoughts vivid, the whole being intensified; next morning sense of constriction at base of lungs; some cough; clammy feeling of skin; very sensitive to air.²—Causes a glow all over; hands sweat; some pain in finger-joints; throat feels obstructed; some hoarseness; dry cough, as if the pharynx were stuffed with cotton; it is an effort to talk; tongue feels partially paralyzed, cannot direct it; throws the paper down, has lost inclination to read; feels indolent, indifferent; feels chills when air strikes; spasmodic breathing, like a nervous woman, silly, mystical; pain in finger-joints continues; feels like crying; sad, weeping mood; tears will come; eyes smart; heart aches, as if from some great sorrow; eyes feel as if they had been crying a long time, as if swollen, burning; very sensitive to cold; easily chilled; chills down the back and both legs; ends with a very tranquil feeling, particularly of consciousness; next morning, tight feeling of patella; joints all feel constricted and sore.³—Very chilly, can't endure cold at all; other symptoms not recorded. In all three, pains and chilliness were much increased by moving about.⁴

RAPHANUS.

Authority. 15, Dr. R. B. Todd, *Med. Times and Gaz.*, 1853 (Berridge, *New Eng. Med. Gaz.*, 1876, p. 301), John Selkirk ate freely of radishes.

Admitted May 27th. Fourteen days before his admission he began to feel a drawing pain, which extended from sternum almost to middle of abdomen; at 7 P.M., May 26th, he began to feel very ill; the pain became more intense and spread to the back, but did not reach lower than umbilicus; he took one half ounce of Castor oil; during the night he became worse, and in the morning the pain still continued very severe; about 8 A.M. the bowels were relieved, but afterwards the pains became worse than ever, and the feeling of nausea which he had felt from the beginning of the attack, became also aggravated; on the 27th, soon after admission, while in a warm bath, he vomited some dark, slimy matter; the vomiting continued at intervals till the 29th; there were tympanitic swelling, and great pain in region of ascending and transverse colon, and also of left groin; the pain was worse on pressure; the pain was of a writhing, twisting character; pulse not above 100; an enema of gruel brought away lumps of fæces, with relief to pain and sickness; convalescent June 2d.^{1a}

RHUS TOXICODENDRON.

Authorities. 99, Dr. D. S. Kimball, Hempel's Jahr's New Manual, Appendix, p. 1041, effects on Dr. K. of gathering and preparing some of the Tox; 100, J. H. Sherman, M.D., New Eng. Med. Gaz., vol. xi, 1876, p. 407, a lady was poisoned; 101, H. M. Logee, M.D., Cincin. Med. Advance, vol. vi, 1878, p. 168, Mrs. W., a healthy woman, aged sixty years, drank a cup of sassafras tea, in which were some roots of Rhus rad., Friday evening, and rather more than a cupful the next morning; (102 to 105, from J. Murray Moore, M.D., Annals of Brit. Hom. Soc., Aug., 1878 (Amer. Hom. Obs., vol., xv, 1878, p. 465), effects of Rhus diversiloba); 102, Dr. Max Werder gives a case of poisoning; 103, E. B. M., a lady, aged twenty-five years, was poisoned by exposure to the shrub; 104, John W., aged twenty-three years, lay down among the shrubs while sweating, and once or twice relieved his bladder there; 105, Wilson K., aged ten years, plucked some leaves.

Mind.—Intellect clouded, has little recollection of her suffering.¹⁰¹

Head.—Dull frontal headache (third day),¹⁰³.—Shooting semilateral pain from temples to vertex, both sides alike affected; shooting pain from nape of neck to vertex; head feels too large,¹⁰¹.

Mouth.—Increase of saliva, with burning pricking pain in the tongue; tongue feels sore at the tip,¹⁰¹.

Stomach.—Great desire for raw oysters,¹⁰¹.—Loss of appetite,¹⁰¹.—[1480.] Anorexia (third day),¹⁰³.—Nausea (after third day),¹⁰³.—Vomiting (fifth day),¹⁰³.—Derangement of the whole digestive system was very marked for three weeks (in the fifth attack),¹⁰³.—In about an hour after the morning draught, she complained of burning pains in the stomach, sickness of the stomach, with dizziness; the stomach felt as though it were too large, hanging down like a bag; soon followed by chills, running from the feet to the head, followed by flashes of heat; chilled every morning during the inflammatory stage, from 2 to 3 o'clock; the pulse was full, varying in frequency from 84 to 98 beats per minute,¹⁰¹.

Abdomen.—Shooting pain in the region of the liver, thence to right shoulder,¹⁰¹.

Stool.—Bowels costive,¹⁰³.—The fæces were unaltered until near the

close of the inflammatory stage, when a painless, brown, watery diarrhœa set in; there was occasionally a little pain before getting up from stool.¹⁰¹

Urinary Organs.—Urine felt hot when passed,¹⁰¹.—Urine scanty, high-colored, and passed with a feeling of heat in the urethra (fifth to eighth day),¹⁰³.—[1490.] Urine red, frequent, and in small quantities.¹⁰¹

Extremities.—Stiffness of the limbs (third day),¹⁰³.—Rheumatic stiffness of all the joints; pain shooting through the knee-joints from side to side; wandering pains, sometimes on one side, and then suddenly appearing on the other; pricking in the feet and fingers; feeling of great weakness; the flesh feels as though it would drop from the arms and limbs; pain seems deep, or as the patient expressed it, "Down to the bone;" all pains aggravated by gentle friction, relieved by hard rubbing only so long as rubbing was continued; wants to move the limbs frequently, which relieves the rheumatic pain, but soon has to change position for similar relief.¹⁰¹

Generalities.—Extreme languor (third day),¹⁰³.—Itching burning (especially in the morning), and vesicular eruption on the hands and wrist and about the eyes, with smarting and redness of the eyes, and photophobia twenty-four hours after gathering, but commencing about eighteen hours previously. Headache through the eyes and temples, with dulness and sleepiness thirty to thirty-six hours after, in the afternoon. Secretion of urine more copious and rather pale. Next day, itching, burning, and extension of the vesicular eruption around the eyes, upper lids, supercilia, mouth, and external orifice of the ears, and drowsiness and dulness of spirits in the afternoon. Headache, slight photophobia, and obscured vision at times, as well as on the previous day. Itching of the scalp. Tongue more furred and appetite not as good. After midnight, on the beginning of the third day, pain, colic, rumbling, and griping in the bowels during repose, with sulphuretted eructations, and discharge of flatus. (Had eaten custard at noon before.) Two or three years ago when similarly affected from preparing some, had loose evacuations in the morning for several days; recurring, in addition to the colic and cutting pains in the abdomen. Rather copious secretion of palish urine continues. Rheumatic pain in the lumbar region and through the hips. Nausea, want of appetite, and loathing of food on rising in the morning, and colic and griping, etc., continue, but better after moving about during the day. Tongue still more coated. Itching of the hands and face still continues, and more extended. Took a dose of Bryonia, and it is proper to remark, that I inhaled Bryonia rather freely the evening of the exposure, otherwise I would probably have suffered still more, as I had done two or three times in as many years before. Fourth day, symptoms all materially relieved, excepting the eruption, which is more extended. Fifth, sixth, and seventh days, first eruption drying up, but coming out on new spots. From a boy up to 1842, I had always been able to handle this and the Rad., and be among it, without experiencing any inconvenience,⁹⁹.—All the sufferings were aggravated at 2 A.M., gradually improving till about 10 A.M., and growing worse towards evening.¹⁰¹

Skin.—The eruption made its appearance in the afternoon, after the second cup, of a bright redness, and an intense burning sensation; it soon covered the whole body from scalp to toes; the head and limbs badly swollen; the eruption, first smooth, soon assumed a minute vesicular appearance, which, in places, ran together, forming small bulbs filled with serum. On the fifth day the vesicles began to dry up, followed by a des-

quamation of the cuticle, with intense itching; the cervical glands were swollen and sore to the touch when the eruption made its appearance; swelling of the eyelids, with œdema of the upper lid,¹⁰¹.—Sunday (the third day) there was an eruption of itching red papules behind each ear and on the neck. On Monday these papules enlarged and became more numerous, and the eyelids were red and œdematous. Face was red and swelled; the cervical glands became tumid and slightly tender. On rising from bed she fainted, and again later in the day syncope came on. On Tuesday the rash had extended all over the face, over the hands, between the toes, and thighs. The itching was becoming more and more intolerable, and partook of a burning character. About the fifth day from their first appearance, the papules had become vesicles, which rapidly coalesced on the face and burst, emitting an acrid serum, which, on drying, formed a crust, so dense as to make the movement of the facial and buccal muscles painful. The nose and lips were much swollen. The œdema of the eyelids was so great as to close up the left eye entirely and the right partially. The burning and itching were somewhat relieved after the breaking of the vesicles. The acute stage was now over (six days after the commencement), but the cracking of the crusts over the face, etc., occasioned such a disfigurement that the lady was confined to the house for a fortnight more; by that time all traces of the skin erysipelas had disappeared, only an unusual irritability (to flannel, etc.) of the integument remained, and a hypersensitiveness to cold air. After a second exposure to the shrub several months later, there was very intense erysipelas of the face for four or five days. The next month there were two attacks. Five months later there was another attack, without fresh exposure, shortly after taking a bath rather too hot. The vesicles that appeared during the first two days were scattered and few, and strongly resembled the eruption of chicken-pox,¹⁰¹.—A fifth attack came on after taking a bath rather too hot, five months after exposure. One of the earliest symptoms was the peculiar rheumatism of Rhus, affecting the legs chiefly, a stiffness of all the joints on first moving them; aching pains in the joints, constant feeling of lameness in the legs. This rheumatism continued nearly three weeks,¹⁰³.—A man was poisoned in California, in September, went back to the Eastern States, had an annual eruption for six successive years, and during the seventh attack was carried off by a pneumonia, which would not have been fatal probably to him when in his ordinary health,¹⁰².—[1500.] Within eighteen hours his face had become red, inflamed, and hideously swollen, his eyes being both quite closed, and the itching and burning were most distressing. The local erysipelas and œdema lasted one week, the papules developing into vesicles, which became confluent, and followed the same course as in the lady's case. The general eruption extended over the whole body, and did not disappear for five weeks. A salt-and-water lotion relieved this the first attack, but failed in two subsequent attacks,¹⁰⁵.—Her face was so swollen, blistered, and mottled, that her best friends could not have recognized her; so badly were the integuments of the eyes swollen, that she could not see. She had a high fever and much burning-smarting pain over the face and head. The day after he had last been among these bushes, heat and itching of the scrotum and inner adjacent surface of the thighs commenced, worse on the hairy parts. Next day the characteristic papules, on a base of diffused redness and œdema, appeared on the forehead and neck, rapidly spreading in all directions, and accompanied with heat, itching, and burning, but

with very little general pyrexia. The itching was relieved by cold, but aggravated by heat, warmth, and rubbing or scratching,¹⁰¹.

Sleep.—Restless, sleepless nights, must move about in bed constantly,¹⁰¹.

Fever.—The next day she felt, in the afternoon, chills and feverishness by turns, and general malaise,¹⁰³.—Slight amount of pyrexia (in the fifth attack),¹⁰³.—Head felt hot,¹⁰⁴.

RICINUS.

Authority. 12, Lond. Med. Gaz., 1840-1, vol. ii, p. 739 (Amer. Hom. Obs., 1876, p. 78).

It has caused salivation,¹².

ROBINIA.

Authority. 8, Dr. Gendron, Ann. Clin. de Mont., 24, 68 (Journ. of Philad. Coll. of Pharm., 1834, p. 285), some schoolboys chewed the bark and swallowed the juice.

Lethargy,⁸.—Vomiting,⁸.—Slight convulsions,⁸.

SALICINUM.

Authorities. 4, S. Ringer, M.D., and J. S. Burg, Journ. of Anat. and Phys., vol. xi, 1877, p. 595, observations on a boy, aged ten years; for the first three days he took no medicine, on the fourth day we gave Salicin in two doses, each of 30 grains, and on the next day a dose of 60 grains; 5, same, observations on a boy, aged nine years; his temperature was taken hourly in the rectum; for two days he took no medicine; on the next two days, he took Salicin in doses of 30 grains, at 10 and 11 A.M., 2, 3, 5, and 6 P.M.; the next day, same at 10 and 11 A.M., 12 M., 1, 2, 3, 4, and 5 P.M.; 6, Dr. Wheeler quotes a case, Hom. Times, vol. vi, p. 27 (Organon, vol. i, 1878, p. 302), Dr. Nankivell, took 10 grains one afternoon.

Mind.—Dulness, so that he did not seem very well to understand questions (third day),⁵.—Dulness and heaviness (in fifteen minutes),⁴.

Head.—Giddiness,⁴.—Headache (in twelve minutes),⁴.

Eye.—[10.] Slight injection of conjunctiva,⁴.

Ear.—Tingling in the right ear (third day),⁵.—Deafness (third day),⁵.

Face.—Face flushed and dull (second day),⁵.—Flushing of the face (in twelve minutes),⁴.—Slight tremor of the lips on speaking (third day),⁵.

Stomach.—Vomited twice (third day),⁵.

Respiratory Organs.—Thick husky voice (third day),⁵.—Breathing rather labored (third day),⁵.—Grasping power weaker than before (third day),⁵.

Superior Extremities.—[20.] Slight spasmodic movements of the upper limbs (third day),⁵.—Trembling of hands when held out (third day),⁵.

Inferior Extremities.—Slight jerks of the lower limbs when they are raised from the bed (third day),⁵.

Generalities.—Muscular twitches (in thirty-five minutes),⁴.—Much

irritability of the muscles on percussion (third day),⁵.—Muscular weakness (in fifteen minutes),⁴.

Fever.—In the evening he had malaise and chilliness. He slept well at night, and awoke apparently well in the morning. By 10 A.M., he felt the malaise returning. There was headache, fugitive pains all over the body, with fever. At noon the temperature was over 101° . This continued all day. He slept well at night, and next day was well. About a month afterwards he brought on a less severe attack of the same kind with a similar dose,⁶.—On the fourth day, after taking three observations, at intervals of a quarter of an hour, we gave by mouth 30 grains of Salicin dissolved in water, at 9.45, and another 30-grain dose at 10.50. The medicine produced a decided, though slight effect on the temperature. Thus throughout the day the temperature remained more stationary than on non-Salicin days. After the first dose, there occurred a fall of 0.2° Fahr.; during the next hour it rose 0.4° in spite of second dose, and the maximum temperature of the day was attained at 11.40. Then instead of rising after dinner and tea, as on the previous non-Salicin days, it slowly and continuously declined, so that at 8 P.M., it had fallen 0.4° , then the diurnal variation commenced, and amounted to 1.7° . Thus the effect of the Salicin on this day was to lower the temperature 0.2° , and to prevent the rise after dinner and tea. Next (fifth) day, after three observations, we gave in one dose 60 grains of Salicin dissolved in 2 ounces of water, at 9.40 A.M. The temperature from this time gradually fell, reaching its maximum fall of 0.8° at 11 A.M.; it then rose and had recovered itself at 12 M., and between 12 M. and 5 P.M., it rose 0.5° ; the evening fall then began and amounted to 1.70° . There was no rise after dinner, and only 0.2° after tea. Thus, on this day, the effect was a fall of 0.8° , lasting about two hours, and no rise after food. The amount of diurnal variation was unaffected on both Salicin days.⁴.—On the first day the temperature rose between 9 A.M. and 1 P.M. 0.9° Fahr., and then slowly fell; the diurnal variation apparently beginning about 6 P.M., and amounting to 2.9° Fahr. Next day, also with Salicin, the course of the temperature was very singular. It remained pretty stationary from 9 A.M. till 1 P.M., and then fell 1° , remaining about this point till 9 P.M., and again fell 1.6° ; the diurnal variation amounting to 2.3° . Next day, the first on which Salicin was given, the temperature fell after the dose of 30 grains, 0.4° in one hour and a half, and remained depressed for about three hours, and then rose to its original height in spite of the continuance of the medicine. The evening fall began at 7.30 P.M., and the diurnal variation amounted to 1.9° Fahr. The only effect, therefore, of the Salicin, was very slight and temporary depression of the temperature, not maintained by the continuance of the medicine, and the diurnal fall was not quite so great as on the two previous days, though within the limits of the variation of health. Next day, when 3 drachms of Salicin, in divided doses, was given, the temperature was not even temporarily depressed; in fact, it rose 0.6° between 9 A.M. and 1 P.M., and then slowly fell 0.3° till 3.30 P.M. The evening fall began between 7 and 8 P.M., and the diurnal variation amounted to 1.5° . Next day, with very marked symptoms, though without Salicin, the temperature ran the same course: rising gradually from 9 A.M. till 1 P.M., and after 4 P.M. slowly falling till 12 P.M.; the daily variation amounting to only 0.9° . On these two days the only apparent effect was to lessen the diurnal range, with a very slight increase in the maximum temperature of the day; and, strange to say, these effects were marked most on the day following the

large doses of Salicin. Next day, temperature pretty stationary, varying only 0.2° from 9 A.M. till 6 P.M., and then fell; the diurnal variation amounting to 1.8° .⁵

SALIX NIGER.

Salix niger, L.

Natural order, Salicaceæ.

Common name, Black willow.

Authority. E. D. Wright, M.D., Amer. Hom. Obs., 1875, p. 177, took $\frac{1}{2}$ ounce tincture in a day.

Gums sore (first day).—Looseness of the bowels (first day).—Muscles sore and lame (second day).—Skin on the temples sore to the touch (second day).—Disposition to lie down and sleep (second day).—Fever (second day).

SALICYLIC ACID.

Authorities. 4, Dr. Balz, Archiv. der Heilk., I, 1877 (Med. Record, vol. xiii, 1877, p. 72), general effects on patients; 5, Dr. H. L. Chase, New Eng. Med. Gaz., vol. xii, 1877, p. 564, effects of the crude and 3d dec.; 6, Dr. Squire, Brit. Med. Journ., April, 1877, p. 428, general effects; 7, Dr. Wheeler, quotes a case, Hom. Times, vol. vi, p. 27 (Organon, vol. i, 1878, p. 302), Dr. Allshorn, took 10-grain doses of the acid, every four hours, for acute rheumatism; 8, Goullon, A. H. Z., 97, p. 68, a strong healthy man, suffering from gout, took Salicylic acid in large doses, which relieved the gout, but produced a series of interesting symptoms.

The unpleasant nervous symptoms, such as tinnitus aurium, deafness, delirium, and mania, which sometimes supervene during its employment, usually disappear spontaneously, and are not dangerous.⁴—First, he was taken with confusion of the head, a reeling sensation like vertigo. The patient expressed it as a sensation one might experience on rising suddenly after lying a long time. This soon became associated with acoustic symptoms. The patient thought he heard music; the sensation repeatedly woke him from sleep. Soon he compared these illusions to a swarm of bees or the buzzing of flies. At this time he broke into a copious perspiration, with red urine depositing a copious sediment. After three or four days, he complained of violent constant pressure in the abdomen, with a feeling of incarcerated flatus. The seat of this distressing pressure at one time was at the side of the navel, in the hypochondrium, at another rather lower down, in the lower abdomen. Associated with it was constipation, for several days. After taking the remedy he had no natural stool. Not the least important was a firmly seated pressure at the side of the sternum, as large as the hand, with a feeling as if the bone were sore. Another symptom was a bitter bilious taste, which he could not get rid of.⁵—Buzzing sensation in the interior of brain, as if blood were forced violently through a contracted vessel.⁷—Slight burning in throat, as from pepper, after each dose.⁷—It has a slight tendency to produce constipation.⁶—[40.] It is readily found in the urine after its administration in rheumatic fever.⁶—From doses of 5 grains of the crude drug he got no marked symptoms; but from doses of the 3d decimal attenuation he experienced soreness and pain in right deltoid and right gastrocnemius, changing on the next day to

the left wrist and forearm. There was some soreness to touch, and great soreness on moving the limb. No heat. The succeeding day the same pain upon the palmar surface of the left forefinger; when the pain appeared in one part it disappeared in the part previously painful.⁵

SAPONINUM.

Authority. 20, Dr. Keppler, Berlin Klin. Woch. Nos. 32, 33, 34, 1878 (Med. Record, vol. xv, 1879, p. 153).

In each experiment he injected 0.1 gram of Saponin into the inner side of his left thigh. The immediate local effect was development of a cutaneous inflammation resembling erysipelas, but much more painful. This inflammation increased in violence for twenty-four hours, remained stationary for the same length of time, and then diminished rapidly. The general symptoms produced by this violent local irritation were the same as would be excited by any very painful injection. The specific local effects of the Saponin, anaesthesia of the point of injection to other irritants, set in about fifteen minutes after the injection, and persisted less than fifteen minutes. The area of the anaesthesia was identical with that of the paleness caused by the injected solution, *i. e.*, it extended as far as the Saponin solution spread in the subcutaneous tissue, and bathed directly the ends of the nerves. Of the specific general effects of the drug the most important was undoubtedly its action on the temperature. This rose steadily for three hours, and then fell gradually to the normal point, which it reached within twenty-four hours. For the next two days there was some fever, but on the fifth day the temperature was far below the normal point, reaching the collapse point of 93°. The pulse also was somewhat elevated the first three days, and fell on the fifth day to 65 per minute. The rise in the temperature during the first three days was evidently due to the violent local inflammation, and it would have been much more excessive had it not been for the specific depressing action of the drug on the pulse and temperature; this manifested itself in its full power on the fifth day, after the local inflammation had subsided. Other general effects of the drug were, marked bodily and mental depression, somnolence, and salivation. The pain, exophthalmus, and strabismus of the left eye, and the greater depression of the temperature on the left side (24° on the fifth day), must be ascribed to direct alteration of the nerve-centres, while the pain in the knee and hip, and the swelling of the glands in the left groin, were evidently due to direct transmission of inflammation.²⁰

SANTONINUM.

Addition by Berridge, in a letter to the editor.

"In your Encyclopedia you quote Hubbard's recent case of poisoning by *Santonin*. As the *side* was not specified, I send the following from Hubbard."

"It was the *left* side that was affected, and the *left* cheek that was red, and was equally red all the time. The swelling commenced nearly under the centre of the chin, spreading each way, but more particularly towards the *left* parotid gland." (See 44, in Vol. VIII.)

Authorities. 45, Binz, Rundschau, May, 1876 (New Eng. Med. Gaz.,

vol. xi, p. 513), a child, aged two years, took $1\frac{1}{2}$ grains; **46**, C. Cuthbert, M.D., *Lancet*, 1877 (1), p. 337, a girl, aged eighteen years, took 4 grains, for worms.

In twenty or thirty minutes after taking the medicine she was seized with giddiness, intense headache, and every object appeared to her of a bright green color,⁴⁶.—[**170.**] Great interference with the breathing,⁴⁵.—Violent convulsions, beginning in the face and extending to the extremities,⁴⁵.

SARRACENIA.

Authorities. **5**, Dr. George H. Bute, *Hahn. Month.*, vol. ii, 1867, p. 424, partial proving; **6**, F. G. Oehme, M.D., *ibid.*, vol. xi, 1876, p. 535.

Age, thirty-five years; great sensitiveness of skin, frequent itching, liability to diarrhoea; piles occasionally. Good health generally. I am not a good subject for proving, as drugs cause but a few symptoms.

Took, several times a day, a few drops of the 1st dec. dil., for a number of days.

Mind.—Want of memory,⁵.

Head.—[**390.**] Dull feeling in the head as if stunned or stupefied,⁵.—Dull pain in the head as if benumbed,⁵.—Twelve hours after taking (the medicine), a sudden stroke (paralysis) from the right side of the head downwards to the right shoulder, and subsequent feeling of crawling, paralysis, and numbness in the shoulder and arm,⁵.—Soon after taking (the medicine), headache and want of recollection, with numbness of the arms and weakness of the lower limbs on going upstairs; then a sudden shock through the head like an electric stroke, after which the senses feel as if paralyzed,⁵.—Pain in the forehead, with stitches above the eyes,⁵.—Dull pain in the back of the head, in the evening in bed,⁵.

Ear.—By drawing the lower jaw towards the left side, a feeling arises as if the air streamed into the right ear, with whistling therein,⁵.

Throat.—A feeling of pressing inward at the pit of the throat, accompanied by headache,⁵.—Just after taking (the medicine), a cramplike pressure about the lower part of the œsophagus, as if the medicine remained sticking there,⁵.

Abdomen.—Pain in the umbilical region,⁵.—[**400.**] Frequently sensation of considerable pressure in the stomach, lasting once for several hours; sensation of fulness in the abdomen, with slight pain in various places, as if caused by flatulency. In a small place in the lower part of the abdomen, a little above the cavity inguinalis, very often a sensation as if a hernia would protrude; sometimes so marked that I examined the place to see if there were any signs of something coming out (I have an incomplete inguinal hernia on the left side, which, however, never caused any trouble or inconvenience). Sensation in the anus as if a stool would come. The same symptoms appeared during a second proving with the 2d dilution, soon after the first proving. Besides these symptoms, bowels irregular, costive. After the close of the proving, bowels very regular. Every morning this call must be answered very soon. During the third proving, a week later, I took the 3d dilution several times a day for several days, whereupon the following symptoms appeared: Slight pain in the bowels as if from flatulency. Costiveness. On various places on the abdomen, a sensation as if a hernia would occur; it felt as if the intestines wanted to come out on a small place; the feeling was very distinct and

marked, but not at all painful. Disagreeable sensation in the anus as if it were stopped up with a plug, or as if filled with wind. Hemorrhoids. Discharge of a little blood with the stool. A proving ten years later yielded the same symptoms as above. At no time the least affection of the skin,⁶.

Sexual Organs.—The menses came at once, out of the proper time; too early,⁵.

Chest.—Bruiselike pain of the muscles and bones of the chest,⁵.

Superior Extremities.—Pain extending from the left shoulder downward to the lower ribs,⁵.—A numbness of feeling in the muscles of the arms and hands,⁵.—Grawing pain in the bones of the arms and hands,⁵.

Inferior Extremities.—Itching stitches on the right shin-bone,⁶.

Generalities.—In the whole body feeling of being unwell, which causes restlessness,⁵.

Sleep.—In his sleep, he dreams that he hears music, and thereupon awakens, and still thinks that he hears it,⁵.

SENEGA.

Authority. 38, E. W. Berridge, M.D., New York Journ. of Hom., vol. ii, 1875, p. 459, Miss —, aged twenty-one years, took several doses of em. (Fincke), for a cold and cough.

Menses came on three weeks too soon; this never happened before, even when she had a cold,³⁸.

STRAMONIUM.

Authorities. 244, J. E. Chancellor, M.D., Virginia Med. Month., March, 1879, p. 962, a child, æt. two years and a half, drank an infusion of the seeds; 245, F. H. Underwood, M.D., Pub. Mass. Hom. Med. Sec., vol. iv, p. 355, Miss A., æt. twenty-two years, in good health, except occasional attacks of nervous restlessness, with a sensation of fear, took a gobletful warm, of a strong decoction made with boiling water.

Mind.—Intoxication, with a feeling of heaviness in the body. Diminished memory; she would begin to speak of something, and before finishing would forget what she was talking about. She does everything in great haste. Her movements are all hurried. Stupefaction of the senses. All things appear to her as if they were new; even her friends appear to her as if she had never seen them before. She apprehends the loss of her senses, or that she is becoming imbecile. She has strange fancies. Frightful fancies. Her features show fright and terror. She does not dare to walk without assistance, lest she should fall. Great anxiety and fear. Restlessness and nervousness beyond description. Constant fear of sudden death. At times believed herself dying, and could not be convinced to the contrary. Great fatigue from the least exertion; when going from her bed to the door of room, only a few steps, she was obliged to sit down twice. Her whole body was sensitive to touch, and every motion aggravated. Frequent attacks of gloomy fancies, accompanied with tears,²⁴⁵.

Head.—Head feels empty, hollow, and sensitive to every sound; it is confused, and she is unable to think much or reckon. Stupid feeling of the head. Vertigo; the head feels drawn backward. Great dislike to

move about, and an inability to sit up straight any length of time. Vertigo when raising the head from the pillow. Her voice, to her, did not seem to have its usual sound; it seemed higher and finer than usual. Great heat of the head. Cold face. A disagreeable lightheadedness, with a feeling of great weakness in the head. Red rash on the face, neck, and back, which resembles that accompanying scarlet fever. Giddiness while sitting or standing in a room. Giddy headache, with faintness. Frequent inclination to raise the head from the pillow. Moves her head to and fro. Redness of the face and eyes. Frequent redness of the face. Her nose feels obstructed and dry, although she is able to breathe through it,²⁴⁵.

Eye.—A sensation as of sparks of fire rushing from the stomach to the eyes. Obscuration of sight; things looked blue and smoky, and at times could see only half an object at once. Redness of the eyes and face. Eyes are staring. All things look smaller, and at a greater distance than they are. Dilatation of the pupils. Extreme dilatation of the pupils. She complains that the rays of the sun dazzle her eyes. Eyes glisten. Dimness of sight; she is unable to discern small things, such as the point of a pin. Indistinct, confused sight. Fiery visions before the eyes. With staring eyes and dilated pupils she saw nothing; did not recognize any of her family. Every one's face looked to her as clear and as smooth as a piece of satin; and small spots like freckles, on a person's face, were not discernible for ten days after taking the poison,²⁴⁵.

Mouth—Tongue.—Tongue felt stiff, dry, and parched to the very root, and felt as if edges rolled up as hard and stiff as sole-leather. Tongue is paralyzed; it trembles when she attempts to put it out. Swelling of the tongue, which hangs out of the mouth. Dryness of the tongue and palate, so that they feel quite rough, with no thirst at first,²⁴⁵. — **General Mouth.**—Sore lips; they parch up and chap, then peel. Grinding of the teeth. Bloody froth at the mouth every morning. Feeling of great dryness in the mouth, with want of saliva,²⁴⁵. — **Taste.**—Water tasted like leather for three weeks. Eggs tasted like Sulphur. Food tastes bitter. Constant bitter taste in the mouth. Loss of appetite,²⁴⁵.

Throat.—Dryness of the throat, with a saliva like stiff froth, mixed with cotton-wool. Dryness of the throat. Strangling sensation in the throat. Food and drink were swallowed with great difficulty, and with a scraping pain. Inability to swallow, on account of dryness of the throat,²⁴⁵.

Stomach.—[1690.] Loss of appetite. Great desire for acid drinks. Sickness at the stomach, with a desire to vomit, but an inability to do so; followed by dizziness, faintness, and a difficulty in swallowing and breathing. Indescribable feeling at the stomach, followed by partial loss of consciousness. Weak feeling at the stomach, as if everything were gone. Weakness from the least exertion, vomiting of sour-smelling mucus. Sour stomach. The first food taken, which was rice-water, had no taste, and felt like apple-cores in the stomach. Stomach smarted and felt ragged, as if full of sores. Vomiting of mucus at night. Anxiety about the pit of the stomach. Anxiety about the pit of the stomach, with difficulty of breathing. A sensation of weakness so great that she could not describe it. Nausea. Bilious vomiting after the least motion,²⁴⁵.

Abdomen.—Abdomen bloated, but not hard. Rumbling in the abdomen. Feeling in the abdomen, as if living animals were moving in it. Emission of large quantities of flatus,²⁴⁵.

Chest.—A feeling of great faintness, as if there were no air, or, as if

the air did her no good. Difficult breathing. Sensation as if something were turning about in the chest. She is unable to inspire a sufficient amount of air. Feeling of dryness in the chest. She has paroxysms of fainting; says she wants more air.²⁴⁵

Heart and Pulse.—A sudden sensation of weakness, and violent beating of the heart. She would wake from a deep sleep with violent beating of the heart. Pulse full and strong. Pressure in the region of the heart.²⁴⁵

Extremities.—Trembling and shuddering of the limbs. Limbs were paralyzed for eight hours. Hands and feet numb, or like wooden ones, or as if they did not belong to the body. Trembling of the arms when eating. Trembling of one hand when eating. Trembling of one limb. Convulsions of the limbs. The limbs feel as if gone to sleep. Drawing pain in the thighs. Sensation as if one part of the joint were separated from another. Immobility of the limbs. Creeping in the limbs. Tingling in all the limbs. Creeping extending from the left side into the thigh. When walking, although she staggers, her limbs obey the will so readily that she feels as if she had none; they seem much longer than they are.²⁴⁵

Generalities.—After thirty minutes I saw her; she was lying on the bed, with her face very red, the pupils dilated; pulse full and strong; great trembling of the limbs, and frequent unsuccessful attempts to vomit. From evident paralysis of the throat she was unable to swallow enough of a mustard emetic to cause emesis. She exhibited great inclination to go to sleep, which she was prevented from doing by the attendants walking, or, I should say, dragging her about the room, her limbs being so paralyzed that she could not walk, or even stand; and she presented a most perfect picture of intoxication. The severity of the narcotism lasted about an hour, and was followed by a state of wakefulness, which lasted about twenty-four hours. During the first two weeks of her sickness, I gathered from her the symptoms, which she assured me were entirely new to her, and many of them, she has since informed me, continued her frequent companions for more than a year. The first effect of the drug she noticed about ten minutes after she had taken it.²⁴⁵—Spasmodic twitchings of the muscles of the upper and lower extremities, unsteady gait and inability to stand erect, with restlessness and incoherence of speech, alternately laughing, crying, and singing; some nausea and disposition to emesis; pupils widely dilated; difficult deglutition; tumultuous action of the heart; expressions of alarm and dread of falling.²⁴⁴

Sleep.—Very drowsy. Restless sleep. While slumbering she heard two persons talk, but did not know who they were.²⁴⁵

Fever.—Cold feet and hands. Slight sweat at night. Chills through the whole body, with single jerks, at times, of the whole body, and at other times of single limbs. Cold limbs. Chilliness and shuddering of the limbs at night. Fever in the afternoon. Sweat on the back. Frequent sweats. Profuse perspiration of the limbs.²⁴⁵

STRYCHNINUM.

Authorities. 162, R. Gilson, Amer. Journ. of Med. Sci., New Ser., No. 150, 1878, p. 449, a man, æt. twenty-five years, took a dose; 163, V. R. Bridges, M.D., Chicago Med. Journ. and Exam., 1879, p. 48, a girl, æt. nine years, took an unknown quantity.

I found him in terrible tetanic convulsions. His legs and arms were extended, hands clenched, feet and toes incurvated, and his body was rigidly arched backward, and resting on his heels and back of his head. In short, all his muscles seemed to be in a state of rigidity. There were also the *risus sardonius*, and a general cyanosed appearance of the skin. During the paroxysm the pulse was too frequent to be counted, and his pupils were slightly dilated. It was impossible on account of trismus and the violence of the general spasms, to administer an emetic by the mouth or to use the stomach-pump. The next morning I found him well, but still feeling some muscular soreness and fatigue, and fully resolved to let Strychnia alone in the future. He said no one could imagine the fearful agony it had caused him, and that he would rather be burnt to death than again suffer the pangs that he had endured from this horrible poison. He told me also that after taking the Strychnia he locked the door of his room, and lay down on his bed to die, as he supposed, in a rapid and easy manner. When the spasms commenced they soon put him in such fearful agony that he screamed for help,¹⁶².—Continuous and persistent spasm from head to foot, with an alarming and distressing opisthotonos, rendered all the more painful from the fact that she was entirely unconscious of her sufferings, while any effort to relieve her by the slightest touch, or causing her to swallow, only aggravated her condition, by apparently exciting every muscle to increase its tension,¹⁶³.

SULFUR.

Authority. 78, S. Thompson, Pub. Mass. Hom. Med. Soc., vol. iv, p. 641, a policeman took 2 ounces Sulphur and molasses at one dose, for army-itch.

Within an hour he vomited, throwing the most of it out. Within five hours a diarrhœa commenced, slight nausea, painful griping and rumbling in the bowels. (I purpose to give the gastric symptoms only). These symptoms continued till the morning of the third day, when the diarrhœa became painless, and almost involuntary. The stool was light-colored, watery, and lienteric. This condition continued till the middle of the seventh day, when the discharges of the bowels stopped, and were followed by symptoms in the lungs and head,⁷⁸.

SYPHILINUM.

The matter exuding from a true chancre.

Preparation, Triturations.

Authority. H. J. Ostrom, M.D., Organon, vol. ii, 1879, p. 262, effects of 1 m.

While medicating the pellets, I was seized with oppression of the chest, to such an extent as almost to arrest breathing. The asthma was caused by a sensation as if the sternum were being gradually drawn towards the dorsal vertebræ. Expansion of the chest was difficult, because of the feeling of tightening. With this there was some confusion of mind, as if unconsciousness might follow if the dyspnœa continued. The attack lasted about ten minutes, and was followed by a general weariness, which passed off in a few hours.

TABACUM.

Authorities. 176, B. C. Brodie, Pharm. Journ., 2d Ser., vol. ii, 1860-1, p. 237, effects of smoking; 177, Wm. O'Neill, M.D., Lancet, 1879 (1), p. 296, Mrs. A., æt. forty years, applied chopped tobacco to a bleeding wound.

Extremely prostrated, pulse scarcely to be felt, skin pale, cold, and wet, with a profuse clammy perspiration. The pupils of the eyes were dilated, and in a faint whisper she complained of dizziness, of dimness of sight, and of confusion of thought, also suffered from severe pain in abdomen, constant nausea, and vomiting.¹⁷⁷—Almost the worst case of neuralgia that ever came under my observation; the pains were universal and never absent; but during the night they were especially intense, so as almost wholly to prevent sleep.¹⁷⁶

TANACETUM.

Authority. 23. A. E. Spaulding, M.D., Philad. Med. Times, vol. vii, 1877, p. 467, a woman, æt. twenty-one years, took a teaspoonful of the oil to bring on the menses.

Convulsion; powerful tonic contraction of the flexor muscles, the forearms were drawn forcibly against the thorax, face deeply congested and livid, foamy saliva was ejected from the mouth, eyes were wide open, and remained so during the convulsion, which lasted from one to two minutes.²³

TARENTULA.

J. Heber Smith, M.D., New England Med. Gaz., New Ser., vol. i, 1879, p. 139. The tarentula by which Dr. Sherman was poisoned, came through the mail, and decomposition had undoubtedly commenced at the time the virus was imbibed into the system, and hence the symptoms in his case were such as might come from the scalp or any other kind of animal poisoning, and therefore the symptoms reported cannot be reliable. (See authority, No. 16, in Vol. IX, of the Encyclopedia.)

TRILLIUM CERNUUM.

Trillium cernuum, L.

Natural order, Trilliaceæ.

Common name, Nodding Trillium.

Preparations, From the root.

Authority. Henry Minton, Inaug. Thesis, presented to Hom. Med. Coll. of Penn., 1853, copied from MSS.

Mind.—Melancholy, with sadness. Repugnance to conversation. Ill-humored, irritable, disposed to get angry at trifling things. Afraid that he is going to be sick; great anguish; agitation and tossing about, impossibility of keeping still.

Head.—Confused head. Attacks of vertigo, with tottering. Swimming in the head. Dizziness, chiefly on rising, in the morning. Weariness

when walking. Dull pain in the left temporal fossa, increased by the least noise. Pain in the forehead, which causes one to bend forward, by which the pains are somewhat mitigated, but they return with all their severity on resuming the erect position. Headache increased by the least noise, and walking or coughing. Head and face feel hot.

Eye.—Pain in the eyeballs; sensation as though they were too large and would fall from their sockets. Blur before the eyes; everything looks bluish. Severe burning in the inner canthus, with profuse flow of tears.

Mouth.—Greasy feeling over the tongue and gums. Very offensive taste in the mouth, especially on rising in the morning. Pungent sensation in the throat. Profuse flow of saliva. Grumbling toothache, and dull pain in the face. Foul taste in the mouth. Insipid taste in the mouth, with absence of appetite.

Stomach.—Disgust for everything except cold water. Continual inclination to drink ice-water. Nausea, with empty eructations. Sickness, with aching of the stomach, and desire to vomit. Excessive pain in the epigastrium. Sensation of contractions in the stomach. Crampy pains, pinchings, and gnawing, with fulness in the stomach. The pains in the stomach manifest themselves mostly after meals and in the morning.

Abdomen.—Swelling of the abdomen, as in ascites, accompanied by a sensation as though the whole contents of the abdomen were drawn back against the vertebral column. Flabby condition of the abdominal parietes, with a sensation of goneness, a want of support in front, accompanied at intervals of a few moments by short, sharp, lancinating pains, which extend from before backward, causing one to bend forward. Much flatulence, with grumbling in the abdomen.

Stool.—Diarrhoea, with painless evacuations, slightly tinged with blood. Constipation succeeded by thin, watery, and very offensive diarrhoea.

Urinary Organs.—Sharp cutting pains in the urethra when urinating. Itching of the genitals, aggravated by scratching. Urine copious and of a strong disagreeable odor.

Respiratory Organs.—Sensation in the larynx as though a crumb of bread or some other foreign substance were lodged there, keeping up a continual coughing. Difficult breathing; a feeling as though the chest were bound up, which prevented it from expanding.

Heart and Pulse.—Palpitation of the heart, with great anxiety.

Extremities.—Crampy pains in the muscles of the arms and calves. Pain in the left shoulder, extending down the arm into the hand. Crampy pains in the fingers when writing.

Generalities.—General debility; feeling of weakness and weariness. The symptoms appear mostly at night and in the morning. Pain aggravated on motion and after eating. Pains mitigated by exercise in the open air. Left side most affected.

Sleep.—Sleeplessness, rolling and tossing in bed. Sleep disturbed by frequent dreams; dreams of festivities, sleigh rides, etc.

Fever.—Feverishness during the pains in the abdomen, on the subsidence of which a profuse perspiration broke out.—Skin hot and dry, with itching and burning, aggravated by scratching.

VERATRUM VIRIDE.

Authority. 43, T. S. Scales, Pub. Mass. Hom. Med. Soc., vol. iv, 283. A man, fifty years old, had compound fracture of humerus; for a week or two his arm did well, and was rapidly recovering, while his general health continued perfectly good; his doctor gave him a heroic dose of Verat. vir. "to see what it would do for him."

Soon the patient was seized with rigors, prostration, a feeling of terrible coldness, and soon mortification of the injured limb, followed by death in a few hours.⁴³

VESPA.

Authorities. 26, Dr. Robert T. Cooper, Brit. Journ. of Hom., vol. xxxv, 1877, p. 345, a boy, æt. nine and a half years, was stung all over by wasps; 27, J. C. Burnett, M.D., Month. Hom. Rev., vol. xxii, 1878, p. 544, a woman was stung on the tongue by a wasp, she soon took *Ledum* 3 in water; 28, William Rowbotham, Organon, vol. ii, 1879, p. 79, I was stung on the right cheek by a wasp.

Next day, about 4 A.M., I was *suddenly* awoke by a sudden burning and stinging sensation in my cheek, and a great soreness and smarting along the course of the lymphatics down into my neck. I found my cheek much swollen and red, and there was a patch of redness about the size of a florin that felt as though it were being pierced with red-hot needles. The temporo-maxillary joint was stiff and painful, and a feeling of soreness ran along the gums to the tonsil on that side of my face. After bathing for awhile the affected parts, I got into bed again, feeling somewhat relieved, and fell asleep; but about two hours afterwards, I was again *suddenly* roused, this time by a sense of suffocation and difficulty of swallowing, and a renewal of the former distress, with intensified severity. Feeling alarmed, I obtained some hot water, to which I added a few drops of tincture of *Ledum*, and fomented the whole of the affected region until the severity of the symptoms abated. During the remainder of that day, and for four days afterwards, the attacks continued to return in *paroxysms* of more or less severity. The submaxillary and cervical glands on that side of my face became increasingly swollen and tender till the fourth day, when these conditions began gradually to abate; but in the immediate locality of the wound the pains assumed a more constant character, throbbing, smarting, and burning; still there was a marked *periodicity* about the stinging and lancinating pains experienced for more than a month afterwards, although the wound suppurated and discharged freely. The general and constitutional disturbances were marked by slight rigors and febrile conditions, felt mostly in the evening, but I was not able to give much attention to them.²⁸—Found her in a state of terrible anxiety, with eyes and face œdematous, and quite unable to articulate or to protrude her tongue, but she could open her mouth a little, and I could see the sting imbedded in the middle of the middle third of the tongue; I at once extracted it. Tongue itself, with its root, and the whole floor of the mouth so swelled that the cavity of the mouth was entirely filled therewith, and then nothing else could be seen. She could not articulate a single word. She suffered great pain in the tongue, which she subsequently described as burning, throbbing, and aching. Her great anxiety was probably not due to the sting, but from fear arising from the evil repute

of wasp-stings in general. To me the point of interest lies in the similarity of the appearance of the patient's face, mouth, and throat to a severe cynanche. There was great dysphagia, so that she could not swallow the teaspoonful of medicine, but was obliged to swallow it in halves, and that with extreme difficulty. The surface of the tongue and the lining of the cavity of the mouth did not seem specially red, the entire swelling being diffuse and deepseated.²⁷—Was stung all over by wasps four or five years ago, this was followed by abscesses all over the body that caused great emaciation; every now and then gets seizures of prostration, with enuresis somni; heat especially overpowers him. Purulent catarrh of the middle ear of both sides,²⁶.

VIPERA.

Authorities. 56, Mr. Tipple, *Lancet*, vol. xi, 1827, p. 732, a boy was bitten on the tongue; 57, G. W. Jones, *ibid.*, 1828-9 (2), p. 78, a man was bitten on the leg; 58, *ibid.*, p. 507, C. S., æt. twenty-six years, was bitten in the right hand; 59, G. W. James, *ibid.*, 1831-2 (1), p. 294, P. B., æt. thirty years, was bitten on the right index-finger; 60, Mr. Canton, *ibid.*, 1857 (2), p. 138, G. S., æt. sixteen years, was bitten on the right thumb; 61, G. R. Halford, M.D., *ibid.*, p. 181, a young man was bitten on the right index-finger; 62, Kadierske, *All. Med. Cent. Zeit.*, 1860, p. 90, a man was bitten on the foot; 63, W. H. Wirt, M.D., *Med. and Surg. Rep.*, vol. xxv, 1871, p. 112, W. A., æt. thirteen years, was bitten on the foot beneath the external malleolus.

Head hanging down, tongue protruding from mouth; face and eyelids much swollen; there was general œdema of the submucous tissue of the mouth and pharynx, with ptialism, vomiting, and pain at the pit of the stomach; no pain nor swelling of the right hand or arm, but great pain in the right axilla. Within a few hours the arm and forearm became enormously swollen, and the axillary glands inflamed and painful. By the next morning the back and inner part of the arm, and the corresponding side of the chest were much ecchymosed, as though they had been beaten with a stick. The finger was the last to become painful and swell, the symptoms travelling downward.⁶¹—The tongue instantly began to swell, and in twenty minutes was greatly swollen, and the vessels on the under surface were gorged with blood; his countenance was pallid, and forehead bedewed with cold perspiration; pulse quick and irregular; a copious discharge of saliva from the mouth, tinged with blood; tongue felt benumbed; in two hours and a half the swelling of the tongue had increased so much that it measured an inch and a half in thickness, and was altered in shape, so as to appear almost square; the under surface was nearly black; he was unable to articulate, and had great difficulty in swallowing, the parts beneath the jaw, and the throat on the right side were much swollen; one hour later the swelling extended to the right side of the chest, as low as the nipple, and it had a crackling or emphysematous feel, as if air were extravasated in the cellular membrane.⁵⁶—In two hours the arm was considerably swollen, and although so short a time had elapsed, his tongue was very much furred; pulse 140, and irregular; he felt much oppression at the præcordia, accompanied with hurried respiration, and great depression of nervous energy. The tumefaction was of an œdematous character; red lines extended in the lines of the absorbent glands, which were tender and slightly enlarged.⁵⁹—The part immediately put on the appearance of a

nettle-sting, and was followed by a sensation of creeping up the arm, and at the same time the veins became much distended, feeling as if they were about to burst; this was attended with severe pain and, subsequently, swelling of the whole extremity, which rapidly increased. About five minutes after the infliction of the wound, he felt a rumbling of the bowels, succeeded by extreme pain and excessive vomiting, which was almost incessant. He became exceedingly weak and faint, and his pulse is said to have sunk so low as 38, and was scarcely perceptible; but from this partial state of asphyxia he soon recovered.⁵⁸—The thumb immediately began to swell, as did also his hand and arm, and it gradually increased in size, accompanied with great pain. This was shortly followed by sickness and depression. In three hours his thumb, hand, and arm, as far as the elbow, were found considerably swollen. This swelling was of rather a peculiar character, being shiny, tense, and elastic, not pitting on pressure. There was no wound observable on the thumb, but a peculiar redness of the arm, which was very diffused; the deep red line of the absorbents, however, could be distinctly traced through the whole length of the arm to the axilla, and from thence separated in three distinct lines, which were spread over the anterior surface of the thorax; from the elbow to the axilla they appeared inflamed, in patches. The fingers were very much swollen, and unable to be moved. He complained of a full, or bursting sensation in his hand and arm, also of great smarting in his axilla, and on pressure being applied to the glands in that region, and along the line of the absorbents, he experienced considerable pain. The pulse was rather weak and sluggish, but all the other constitutional symptoms had subsided.⁶⁰—On the next day the foot, leg, and thigh were swollen, the skin red, the veins and superficial lymphatics swollen, bluish-red above the popliteal space; the rest of the body was also oedematous, especially the upper lids and tongue, which the patient could scarcely move. Pulse small and rapid; respiration difficult; the patient complained of great prostration, anxiety, pressure in the præcordial region, and inclination to vomit. The wound had assumed an intensely bluish-red color, and there was excessive anxiety about the præcordial region. The patient had begun to be comatose. An infusion of Arnica was applied to the limb. The patient was given Arnica, Camphor, and Sweet spirits of nitre internally. After three days, the symptoms having generally disappeared, the patient still complained of pain on the tip and under surface of the tongue, and as though burnt, and as if there were blisters on it. In fact, the epithelium was denuded, especially on the tip of the tongue, and blisters had begun to form. For several days the lymphatic vessels and glands, especially in the popliteal region, were hard and painful on moving the limb, for which Iodine was given internally.⁶²—In two hours the swelling began to extend rapidly upwards to some distance above the knee-joint, the patient suffering great pain in the limb, accompanied by nausea, vomiting, headache, and giddiness.⁶⁷—The foot and entire limb enormously swollen; pulse small, frequent, and irregular; occasional vomitings and faintings; cold sweats; wild and woe-begone expression on his countenance.⁶³

ACONITUM.

Authority. 108, Drs. Flechner, Frankel, and Schneller, *Zeit. der k. k. Gesel. der Ärzte zu Wien*, 1847, p. 107; they began with $\frac{1}{2}$ grain of the extract of the fresh herb, and increased to $26\frac{1}{2}$ grains.

The first doses of from $\frac{1}{2}$ grain to 5 grains caused only frequent eructations, diminished appetite, scanty stools, and, somewhat later, a dull headache, especially in the frontal region, lasting some hours. Doses of $5\frac{1}{2}$ to 10 grains caused pressure in abdominal region, distension of the abdomen, slight gripping about the navel, nausea, white coating of the tongue, diminished appetite, dryness and scraping in the throat. In addition, a sensation of heaviness in the head, especially in the frontal region, weariness in the limbs, increased warmth in the whole body, ill-humor, with a certain mental restlessness and disturbed sleep, accelerated pulse and palpitation. Larger doses, 20 to 26 grains, aggravated the abdominal symptoms, and, in addition, caused pain in the abdomen, great nausea, great evolution of gas and rumbling in the bowels, increased and prolonged frontal pain, restless sleep troubled by dreams, and at times transient stitches in the præcordial region. In one person the extract caused no effect, except swelling of the tonsils and scanty stool. In another prover, in addition to the preceding, there were the following symptoms: nine hours after $24\frac{1}{2}$ grains, violent drawing pain in the back, seated in the lumbar region, so that every movement of the trunk, standing up, stretching out, stooping or sitting down, were very difficult; the place was also painful to external pressure; this pain disappeared after five hours, reappeared in the same manner in the abdominal muscles, which became tense like a board. This disappeared after a few hours, leaving only some tension in the abdomen. From a dose of $26\frac{1}{2}$ grains taken two days later, there set in sticking pains in the left hypochondrium, back, and head, and after nine hours tension in the lumbar region. In the same person there was weakness of memory, apparently occurring in connection with the above-mentioned mental restlessness, which did not allow him to fix his attention for any length of time,¹⁰⁸.

AILANTHUS.

The following revision of "Authorities" 3 to 13 is intended to be explanatory, Nos. 15 to 17 are new.

Authorities. 3, J. T. Alley, M.D., *North Amer. Journ. of Hom.*, vol. vii, p. 385, made tincture from flowers just before maturing, of about 1 ounce to a pint; I took it in drop doses four times a day, for three weeks, and gave it to two young men, who took it each about two weeks; I took it three different times, continuing each time about three weeks; my last proving was with the 1st dil.; only symptoms common to all provers are given; 4, same, *U. S. Journ. of Hom.*, vol. i, p. 285, Mrs. F.'s symptoms during flowering season; 5, same, *ibid.*, Mr. M.'s symptoms during flowering; 6, H. Minton, M.D., *ibid.*, vol. ii, p. 668, made tincture from leaves, bark, and woody Ailanthus, and gave a young man 2 drops at 8.15 and 10.15 A.M. (first day), 2 drops (second day, and from the fifth to the fifteenth days inclusive); 7, same, a man, aged twenty-eight years, took 3 drops tincture at 5 P.M., and 5 drops tincture in solution at 8.15 P.M., seven days later took 3 drops tincture at 8.30 and 9.15 A.M.; 8, same, J. C. L.,

aged twenty-one years, took 1 drop every hour till he had taken eight doses, and then he took a teaspoonful; **9**, P. P. Wells, M.D., Amer. Hom. Rev., vol., vi, p. 268, effects of aroma, and U. S. Med. and Surg. Journ., vol. iv, p. 330, a proving, dose not mentioned (symptom 138); **10**, same, Amer. Hom. Rev., vol. iv, p. 385, a girl, aged fifteen years, stripped outside bark from the young and tender shoots, and then after writing letters on stalks with a pin, moistened these with saliva, which was rubbed on them with the finger, this was repeated many times, and the juice was thus conveyed to the mouth; **11**, same, effects on a boy, of eating the seeds; **12**, W. Williamson, M.D., U. S. Journ. of Hom., vol. ii, p. 668, some little boys smoked the stems like segars; **13**, Hale's New Remedies, third edition, a résumé; (15 to 17, from Dr. Giraud, Thesis, Paris, 1875); **15**, effects of the bark on Dr. Hettet; **16**, Dr. Robert, who published the first work on Ailanthus in dysentery, experimented on himself with the infusion, see Archives de Navale, 1874; **17**, Dr. Giraud, took two spoonfuls of an infusion.

General malaise, sensation of feebleness, and dimness of vision and nausea,¹⁵.—He found it extremely bitter, causing nausea, sometimes vomiting. After an hour there was very notable diminution of the pulse, of about 10 beats, which persisted for half an hour, after which it rose and became more frequent than normal,¹⁶.—After a quarter of an hour there was nausea, accompanied by anguish, similar to that caused by Ipecac. Sensation of tightness in the temples. All these symptoms increased after half an hour to vomiting; the pulse had increased from 68 to 76, temperature from 37.2° to 37.3°. After this he experienced a peculiar sensation of emptiness in the stomach. Pulse 80. Temperature 37.7°. This was followed by a fall of the pulse to 64, and a sensation of coldness over the whole body. After a few hours there was colic, followed by a soft stool. In another experiment, he took an infusion, pulse 78. There was no nausea; after three-quarters of an hour, pulse 70, and a sensation of coldness; the pulse rose to 76. After four hours some colic and soft stool,¹⁷.

ANTIMON. ET POTASS. TART.

Authority. **67**, Dr. Molin, Des Spécifiques en Médecine, Paris, 1847 (Brit. Journ., vol. vi, 1858, p. 118).

Observation 1.—Being in a good state of health, my pulse beating 64 per minute, I took at 8 A.M., before breakfast, 5 milligrams of Tartar emetic in water. This dose was repeated for five days without perceptible effect. The sixth day I felt nothing until 4 P.M. The respiration then appeared to me a little less free. Feeling no further effects, and my appetite continuing good, I took on going to bed about 9 o'clock, a dose of 1 centigram. The night was passed in a restless manner, and the sleep interrupted by a fatiguing heat; I felt necessitated to drink several times; the respiration was slightly impeded; on rising, general uneasiness, weariness, similar to what follows a febrile fit, the mouth clammy. I took at 8 o'clock in the morning, 1 centigram. No appetite; a simple soup for breakfast without relish. All the day I was in the same state. About 5 P.M., greater uneasiness, especially about the epigastric region; nausea; desire to vomit, but without result; respiration more impeded; short dry cough, pretty frequent; great thirst; heat in the head; white tongue; drinks appear always too sweet; clammy mouth; two loose evacuations during

the day; palpitation of the heart; bruised feeling and general weariness, compelling me to go to bed at 8 o'clock. The ear applied to the chest gave evidence of nothing abnormal, except that the respiration appeared much too rough. At 9 o'clock I took another dose of 5 milligrams. Agitated sleep, difficult respiration, feeling of pressure on the chest during sleep. At 5 A.M., I was awakened by a violent rigor, it lasted twenty minutes, and was followed by heat; the pulse, which had been little affected during the two previous days, increased to 78, was full and strong; skin hot; face red; thirst urgent; heat in the head; pretty strong palpitation of the heart; slight burning at the stomach; fulness and inclination to vomit; respiration very much impeded; feeling of pressure and constriction of the chest; cough frequent, and a little moister; on auscultation, the respiration appeared rougher than the previous evening, and deep inspiration was accompanied by slight pain under the left nipple. Night very agitated; nightmare; disagreeable dreams. I felt much the same in the morning as I had the previous day, but deemed it advisable not to carry the experiment further. During the subsequent days, the following symptoms occurred. The tenth day no stool; towards evening, pulse 72; respiration somewhat less difficult; cough the same; hardly any pain in the side; great thirst; a good deal of uneasiness; no inclination to vomit; night, a little less restless. The eleventh day, a little less roughness of respiration on auscultation; cessation of the pain; pulse nearly normal; skin still hot; thirst less; uneasiness diminished; appetite in part returned; respiration still obstructed; cough a little less; the night more tranquil. Twelfth day, appetite; breathing nearly free; the cough continues; still a little uneasiness; scarcely any thirst; tranquil night. The symptoms continued to diminish the subsequent days, so that by the eighteenth there remained no trace of indisposition, except slight cough, which persisted some time longer. Not being sufficiently edified by this single experiment, three months subsequently, I commenced another.

Observation 2.—During eight days, I took each morning, 5 milligrams of Tartar emetic, without feeling anything. The ninth day, at 8 P.M., I took another dose of 1 centigram; night somewhat disturbed; the respiration appeared somewhat less free, but that was not very distinct. The tenth day, on rising, a little weariness; I again took 1 centigram. During the day I had some uneasiness; mouth clammy; little appetite; breathing impeded. About 10 P.M., I took another dose of 5 milligrams; sleep very disturbed, and towards morning uneasiness, especially at the epigastrium; some nausea; loss of appetite; respiration impeded; a watery stool at night; great fatigue; urgent thirst. From the morning of the eighth day the cough appeared, and went on increasing; it is short, frequent, and painful; auscultation gave no results. At 9 A.M., 1 centigram was taken. In the course of the day, rigor, which lasted half an hour, with burning in the head and beating of the heart; thirst; inclination to vomit; pulse 80, strong; skin hot; cough dry and painful; considerable difficulty of respiration; sensation of weight on the chest; auscultation shows rough respiratory sounds; general bruised feeling. This state continued all day and night, which was very much disturbed by strange and fatiguing dreams. There were two watery stools during the twenty-four hours. The following days the symptoms declined, but more slowly than the first time, so that by the twenty-fifth day I had not entirely recovered my health,⁶⁷.

APIUM GRAVEOLENS.

Authorities. 2, L. W. Berridge, M.D., Amer. Journ. of Hom. Mat. Med., vol. viii, 1874, p. 126, effects on Miss. —, from eating celery; 3, W. J. Ramsden, Brit. Med. Journ. (Hom. World, 1878, p. 343), a patient ate a whole stick of the vegetable.

During the following day and night, a most obstinate retention of the urine, which could only be relieved by the catheter,³—Inability to sit still or lie still in bed, from feeling of “fidgets;” cannot keep mind from thinking.²

BELLADONNA.

Authority. 286, Drs. Flechner, Frankel, and Schneller, Zeit. der k. k. Gesel. der Ärzte zu Wien, 1847, p. 97, a proving beginning with 2 drops of the tincture, and increasing irregularly to 130 drops.

A dose of 2 to 30 drops, especially the latter, caused slight dryness of the mouth and nose, insipid taste, yellowish fur on the tongue, diminished appetite, dulness in the frontal region, roaring in the ears, weakness of vision, with normal, rather contracted pupils; in one person, in addition, pain in the small of the back; in another person stitches in the region of the shoulder, and in the left side in the region of the false ribs. From 35 to 60 drops the above-mentioned symptoms in the mouth and fauces increased to a distressing degree. There was burning in the hard palate and throat, with great redness of these parts, the voice became hoarse, the intestines distended by gas and painful. The head became dull, there were vertigo, sleepiness, and frequent yawning, restless sleep. In two provers there were also transient stitches in the region of the heart, tearing pain in the head, in the region of the shoulders, and in the feet. These symptoms continued in a less degree, even on the following day when nothing was taken. After doses of 65 to 130 drops, the above-mentioned symptoms increased, with the exception of transient pains; the eyes became especially affected, there was foggy vision with vertigo, the eyes seemed covered with a veil, reading was very difficult, the conjunctiva was injected, the pupils in one case, from 110 drops, dilated. Lastly it was noticed that the urinary organs became affected, so that micturition was accomplished with great straining and difficulty. On the same day in which one prover took 110 drops, an experiment was made with an external application to the conjunctiva; a few drops were rubbed into the upper lid, and some trickled into the inner canthus. About a quarter of an hour afterwards there was some dilatation of the pupil, which increased so that after two hours there was scarcely a line of iris to be seen. The margins of the lids became red, the conjunctiva slightly injected; even the pupil of the other eye was somewhat dilated. The iris of the right eye was sluggish in action, vision was very weak, and the eyes seemed veiled. On the next day, the right pupil was still considerably dilated and vision very much restricted, especially in the open air. At the same time the eye was drawn somewhat upward and outward. On the third day vision was only somewhat weak, the pupil remained dilated for several days. The following were the chief observations from twenty-one provings with three different preparations: the mucous membrane of the mouth and fauces was first affected; thence the affection extended upward to the mucous membrane of the nose and frontal sinuses, and partly to the conjunctiva and Eustachian tube, then

downward into the larynx, then from the throat into the stomach and intestinal canal. This affection consisted essentially of dryness of the parts, for example, dryness of the whitely coated tongue, pasty taste, diminished appetite, desire for liquids without thirst, scraping in the throat, difficulty of swallowing, hoarseness, difficult speech, sneezing, nausea, inclination to vomit, pressure in the stomach, diminished stools, increased gas in the intestines. As objective symptoms, there were dark redness and swelling of the mucous membrane as far as could be seen. A second sphere of action of Belladonna seemed to be the brain. The symptoms consisted of vertigo, pressing and aching pain in the head, reeling and slight stupefaction, sleepiness; the sleep, however, was restless and disturbed by vivid dreams. There were general prostration, general ill-humor, and disinclination to mental work. Dulness and confusion of the head lasted a long time. Of the two extracts, the alcoholic and the aqueous acted in a greater degree upon the brain than the extract of the Austrian Pharmacopœia; with the former it was especially noticed that with the increase of the symptoms of the mouth and fauces the head symptoms diminished. There was noticed an antagonism between the two preparations. The disturbance of vision began with a slight degree of weakness and fogginess, sensitiveness to light, and progressed to illusions of vision, flickering and visions of colors, a feeling of pressure in the eyeball, increasing to a high degree of weakness of vision, with injection of the conjunctiva, increased lachrymation and dilated pupils. From the external application of the above mentioned, the symptoms were more pronounced; the pupils were extremely dilated, the iris less sensitive, and the eye turned upward and outward. Especially interesting was the action of Belladonna upon the urinary organs. Without calling particular attention to the nocturnal erections, produced by the smaller doses, there was noticed relaxation of the urinary organs in such a way, that there was frequent desire to urinate, with inability to pass urine except by great pressure, and then only guttatim. The action of Belladonna on the skin was increased warmth, amounting even to glowing heat of the face, turgor, and a very deep-red color, even a cherry red. In one person, $4\frac{1}{2}$ grains of the Austrian extract caused red circumscribed spots on the face. In the vascular system in general there was a feeling of chilliness, coldness of the extremities, alternating with heat and increased transpiration, accelerated pulse, and palpitation,²⁰⁸

CALCAREA MURIATICA.

Calcium chloride.

Authority. August Wimmer, M.D., "The Salt-waters of Kreuznach," translated by the author, Kreuznach, 1878.

I made these experiments first in October, 1876, in a period of three weeks. In the first seven days, I determined the quantity of the oxidation of my body; I determined, therefore, daily the weight of my body, farther the weight of the solids and fluids which I partook of, and the weight of elimination of the urine, of the dejecture, and by the skin and the lungs; the latter, by comparative calculation of the excretion of urine and of dejecture with that of the body.

Twice a day, in the morning at 8 o'clock and in the evening at 6 o'clock, the quantity and quality, the reaction and specific weight of the urine were determined and analyzed, after the well-known methods of "Titrirung," of

Neubauer and Vogel, into the constituents of urea, uric acid, sulphuric acid, phosphoric acid, and chlorine, with the utmost carefulness, and with the observance of all precautionary measures.

The temperature, the state of the barometer, the direction of the wind, weather, the state of the health, and the functions of the skin, were at the same time carefully observed.

In the period of seven days following that of the preliminary examination, I took daily 0.5 gram, and in the seven days following the second period 1 gram Calcium chloride, dissolved in a glass of spring-water, and I continued the daily determination of the weight of my body, of the reception and of the elimination, as well as the analysis of my urine, and observed as much as possible the same relations with regard to the movements of the body and to the food as during the preliminary examination.

Only the determination of solid food was too difficult, and as my mode of living for many years has been the same daily with regard to the quantity of vegetables, bread, sugar, etc., I only weighed my daily portion of meat, because meat essentially influences the secretion of urea and uric acid. The results of the three weeks' series of examination were so abundantly convincing that a second series would not then have been necessary. However I preferred making a second one of a longer duration, to guard against the imputation of a premature judgment. The execution of the same was not possible until April, 1877.

I found no reason to deviate from the method followed in the first series of examination, and preceded it also by a preliminary examination of seven days. In the first four days I determined the weight of solids and fluids; only later, the daily quantity of the meat and the fluids. I separated the latter from the fat, and took it partly raw, chopped, partly slightly cooked. A change was made of the different kinds of meat, beef, pork, and veal. For the first breakfast I took tea and white bread without butter; for the second, bread and butter; for dinner, meat, soup, vegetables, and raw or cooked meat, with only a few potatoes; in the afternoon, a cup of coffee, and in the evening, tea with bread, butter, and meat.

I give in the following the results of the second four weeks' examination, made in April, 1877, in calculated average amounts, because the statement of the daily results of examination would take too large a space, and the average amounts are fully sufficient for judging the matter.

I only add that the results of the second series of examinations are fully identical in regard to the essential points with those obtained by the first series of examinations, and that I am fifty-seven years of age.

TABLE I.

First period (the preliminary examination), 3d to 10th of April, 1877.									
The average state of the barometer, 758 minims. The average temperature of the air, 9.5° C.									
THE SUPPLY.				THE ELIMINATION.					
Solids.	Fluids.	Quantity.	Specific weight.	1. OF URINE.		2. Of the dejecture.	3. By the skin and lungs.	Weight of body.	
				Reaction.	Particular ingredients.				
1102	1582	1528	1021.5	Sour.	Urea..... 34.25 grams. Uric acid..... 1.146 " Sulphuric acid... 2.25 " Phosphoric acid. 3.18 " Chlorine..... 11.560 " Totality..... 52.386 grams.	171	965 grams.	90.5 kilo.	
Totality,									
2664 grams.		Totality of the elimination..... 2664 grams.							

TABLE II.

Second period (0.5 gram of Calcium chloride), 10th to 17th of April, 1877.									
The average state of the barometer, 758 minims.					The average temperature of the air, 9° C.				
THE SUPPLY.				THE ELIMINATION.					
				1. OF URINE.					
Solids.	Fluids.	Quantity.	Specific weight.	Reaction.	Particular ingredients.			2. Of the dejecture.	3. By the skin and lungs.
1102	1582	1596	1022	Sour.	Urea..... 36.65 grams. Uric acid..... 0.925 " Sulphuric acid... 2.85 " Phosphoric acid. 3.32 " Chlorine..... 12.45 " <div style="text-align: center;">Totality.....56.195 grams.</div>			173	958 grams.
Totality, 2684 grams		Totality of the elimination..... 2727 grams.							

TABLE III.

Third period (1.0 gram of Calcium chloride), 17th to 24th April, 1877.
The average state of the barometer, 765 minims. The average temperature of the air, 10.5° C.

THE SUPPLY.				THE ELIMINATION.				
Solids.	Fluids.	Quantity.	Specific weight.	Reaction.	1. OF URINE.	2. Of the dejectura.	3. By the skin and lungs.	Weight of body.
					Particular ingredients.			
1102	1582	1625	1022.5	Sour.	Urea..... 38.57 grams. Uric acid..... 0.775 " Sulphuric acid... 3.256 " Phosphoric acid. 3.442 " Chlorine..... 13.155 " <div>Totality..... 59.198 grams</div>	180	955 grams.	89,668 grams; less for 7 days, 532 grams; less for 1 day, 76 grams.
Totality, 2684 grams.				Totality of the elimination.....2760 grams.				

TABLE IV.

Fourth period (1.5 grams Calcium chloride), April 24th to May 1st, 1877.
The average state of the barometer, 765 minims. The average temperature of the air, 108° C.

THE SUPPLY.		THE ELIMINATION.						
Solids.	Fluids.	Quantity.	Specific weight.	Reaction.	1. OF URINE.	2. Of the dejecture.	3. By the skin and lungs.	Weight of body.
					Particular ingredients.			
1102	1657	1685	1023.2	Sour.	Urea..... 39.675 grams. Uric acid..... 0.442 " Sulphuric acid... 3.945 " Phosphoric acid. 3.972 " Chlorine..... 13.82 " <u>Totality..... 61.854 grams.</u>	194	1005 grams.	88,793 grams; less for 7 days, 875 grams; less for 1 day, 125 grams.
Totality 2759 grams.		Totality of the elimination.....2884 grams.						

The taste of Calcium chloride is salt and disagreeably bitter. It caused no burning, and particularly no disagreeable feeling in the stomach and in the intestines during the whole examination.

The appetite was not increased, but also not lessened. The tongue

showed no change, as also the heart and pulse no difference from their normal state.

Only the feeling of thirst began to increase in the middle of the III period of examination, and it was necessary to allay it by drinking more water (75 grams per diem). For the rest the supply of solid food remained the same; it produced also no need for more food, but rather an indifference for it.

Calcium chloride has a diuretic effect, as the tables show. In the II period (0.5 gram per diem) the secretion of the urine increased daily to the amount of 68 grams. This effect began first on the fourth day of the II period, and increased in the following days. In the III period it increased daily to the amount of 29 grams, and in the IV period, however, by daily increased supply of 75 grams of water, to 60 grams.

The dejecture was not changed in regard to the compactness; in the III period the same increased daily to the amount of 6 grams, and in the IV period of 19 grams, in comparison with the I period of the preliminary examination. The consistence in the IV period was more pappy.

The discharge through the skin and by the lungs had, in the II period, hardly changed at all; in the III it on an average daily diminished to the amount of 13 grams; however in the IV period increased daily to 40 grams. This increase is probably to be attributed to the higher temperature in this period; the activity of the skin was greater during this period with regard to the secretion of perspiration.

Notwithstanding the diuretic effect the Calcium chloride increased also the solid parts in the urine. The specific weight of the same increased regularly from 1021.5 in the period of the preliminary examination to 1023.2 in the IV period.

The quantity of all the solid ingredients of the urine, with the exception of the uric acid, was increased.

The *urca* gradually increased in the course of the III period, and was finally secreted, in the IV period, to an average daily amount of 5.42 grams more than in the I period of the preliminary examination.

On the contrary, the *uric acid* was regularly less secreted, upon an average daily of 1.146 grams in the I, and 0.442 gram in the IV period, therefore less 0.704 gram per diem.

Sulphuric acid and *Chlorine* offer an almost equal progressive increase; the former in the

I period,	.	.	.	.	.	.	.	.	2.25 grams.
IV period,	.	.	.	.	.	.	.	.	3.94 "
Therefore increase,									1.69 grams.

The latter in the

I period,	.	.	.	.	.	.	.	.	11.56 grams.
IV period,	.	.	.	.	.	.	.	.	13.82 "
Therefore increase,									2.26 grams.

The *phosphoric acid* was only a little increased in the II and III periods; however in the IV, on an average daily of 0.79 gram, in comparison with the results in the I period of the preliminary examination. The regular decrease of the weight of the body corresponds with the increased oxidation. In the I period it remained nearly the same; in the II period it

decreased to 43 grams; in the III period to 76 grams; in the IV period to 125 grams, on an average daily; so that the body had lost during three weeks 1700 grams (1.7 kilo.). Also the state of health had changed towards the middle of the fourth week. A feeling of exhaustion, weakness, and disinclination to work began to be felt. Although a part of these feelings may be attributed to the spring air, the steady decrease of the weight of the body and the falling of subcutaneous cellular texture (panculus adiposus) were too evident facts.

Although it had been my intention to continue the examination for the fifth week, these feelings hindered me.

The process of oxidation was much increased in the II period (0.5 gram Calcium chloride) and in the III period (1 gram Calcium chloride), and, nevertheless, the need of food was not increased; however the oxidation in the IV period increased to such an extent (daily average decrease of the weight of the body 125 grams) that one might have expected in consequence an increased need of food. Instead of this a certain indifference for food was felt,²

CALOTROPIS. •

Calotropis gigantea R. Br. (*Asclepias gigantea*, Roxb.).

Natural order, Asclepiadacæ.

Common name, In India, Mádár; Sanscrit, Arka.

Preparation, Tincture of bark of root.

Authority. E. B. Ivatts, *Hom. Worl*, vol. xiii, 1878, p. 15.

PROVING No. 1.

Dilution No. 1.—The tincture was made by Treacher & Co., Bombay, from root, in proportion of one of root to eight of spirit.

September 23d, 1872. Began in evening to take 10 drops, and continued same twice a day.

September 27th. Dull headache at back of head, commencing about 11 A.M., gradually increasing up to bedtime 12 P.M. Experienced the same kind of a headache when suffering from a bilious attack. Bowels relieved in the morning; took meals as usual, and meat at supper-time. Headache very bad at times during evening.

September 28th. Slept well, headache gone, but head light, which feeling passed off after breakfast; bowels relieved same evening. Stopped medicine for two days.

October 1st. Recommended medicine, same dose as before.

October 13th (Sunday). After breakfast, about 10.30 A.M., bowels naturally relieved, and went out for a walk. Shortly experienced a depressed tired feeling, which came on gradually. In half an hour, felt an inclination to vomit and faint. Sat on the roadside and drank cold water; rested half an hour and became better. Obtained a carriage and drove four miles, feeling better, but very cold, so much so, that I walked a mile beside the vehicle to get warm and keep up circulation. Reached home at 2.30 P.M.; felt dizziness in head; no pain. Urinated frequently; eructations constantly. At 5 P.M., attempted to eat a biscuit; felt faint, giddy, and inclined to vomit, so went to bed. Body cold, with frequent chills passing up the spinal cord; at same time head and temples hot, and cheeks burning like fire. After a time, with rugs on bed. I became very hot and perspired; pulse quickened, but I was too ill to attempt to count it. These

feverish symptoms of heat and cold continued alternately, with nausea, but not actual sickness until I got some strong coffee to sip, then I vomited about the contents of a wineglass, a yellow bile. This was about 5.30 P.M., and a lesser quantity was vomited an hour later. Oppression of chest and short respiration, but no inconvenience at heart. Lips and throat very dry and parched, having to moisten them with tongue every minute or so. Head painful, with throbbing and confusion. Sipped coffee as an antidote all night. Got little or no sleep, tossing from side to side. Had felt slight pain when moving, in the inside of right thigh just below crotch, two days before. During night, felt all down back of right thigh to be very sore, red, and hard, so much so that I had a difficulty in turning over in bed.

October 14th (morning). Convalescent but weak. Thigh so sore, swollen, and painful, that I could not bend the leg in walking, and walking gave me pain at every step, even with the aid of an umbrella as a walking stick. In fact, I was quite lame. Travelled 120 miles by train. Toward bedtime chills came on again though sitting close to fire. Chills continued in bed, they seemed to commence in the feet and run up the spinal cord. Occasional movement of the feet in bed seemed to bring on the chills. Alternating with the chills were fits of perspiration, the same, but less in degree than the previous night. Restless and feverish, with head and face hot; breath foul; unable to sleep. *Camphor rub.* gave relief and sleep. Pulse on going to bed weak and thready. Urine dark red, like home-brewed beer, and with strong smell. No noticeable deposit after twelve hours' standing. Cramplike pains in centre of palm of right hand when grasping anything, lasting many days. Pain, but less in degree, in wrist, when moving it. Slight soreness and swelling of right palate, giving pain when moving jaws in eating, lasting two days.

October 15th. Well, except thigh, which, however, is better, but has confined me to the house. Diffused red blotches came out on thigh, elevated and papular, and went away in three days; noticed to-day veins of hands, which are usually full and elevated, seemed thinner and depressed, and as I thought shrunken or contracted, so as to be hardly distinguishable. Drank coffee during day, and took several doses of *Camph. rub.*

October 16th. Better night. Thigh not so sore; could bend leg slightly, and walk about house a little; no pain when sitting or lying. When standing up to walk, tingling-burning pain. *Aconitum* lotion, on lint, with oil-silk over swelling, and *Aconitum* 1x internally, continuing Coffee, enabled me next day to walk out, and all symptoms passed away.

PROVING No. 2.

Had been taking the drug in 1x dilution for some few days, when the following physiological effects were produced.

September 27th, 1873. Slight pain in left foot, no superficial tenderness; no inflammation. Tenderness seemed located in tarsal bones of the foot; pain only on movement, or on bearing weight on foot.

September 28th. In the morning, on waking and moving foot, found increased pain; had to keep to house. Took *Hepar sulph.* 2x twice, which seemed to increase pain. Had a very bad night, intermittent pain without movement, while foot rested on bed. Restless; kept moving foot about the bed. Pain cramplike.

September 29th. Pain nearly all gone, except when attempting to move foot in bed; took two doses of *Aconitum* 1x dil. About 6 P.M., pain when

foot was at rest, so severe for about an hour, that it brought tears to my eyes; took coffee, and pain while foot remained at rest soon ceased. Continued drinking coffee frequently to the end, and had no more pain, except when moving foot or bearing weight on it. Instep slightly red and swollen, still no outside tenderness. Could not let foot touch the ground, the pain was so acute, yet by putting the foot down very gradually in spite of some pain, and over a space of one or two minutes, and by degrees bringing the weight of the body upon it, I could stand without pain. Immediately, however, I took the weight off again, however so gently, the pain came back.

September 30th. Foot improving, can put it to the ground, and bear weight for a little time occasionally.

October 1st. Still improving, can use foot more. A redness came out simultaneous with the improvement; used coffee as a lotion on rag for an hour, which sent the redness in and made the foot worse, so I stopped it. Slight pain in right foot before trying coffee lotion.

October 2d. Left foot better; right foot has now become affected in same manner, and now is the worse of the two.

October 3d. Still improving, but the left foot the better of the two.

October 4th. Improving, able to put on a large pair of loose boots and go into garden.

October 5th. Condition nearly normal, put on ordinary boots, and slowly took a short walk. Next day quite well.

CARBONEUM SULFURATUM.

Authority. 59, T. Wilson, M. R. C. S., Brit. Journ. of Hom., vol. xvii, p. 274, effects of vapor.

April 15th, 1857. In good health, aged thirty-eight years. Yesterday I was exposed in a small room to the vapor of the Sulphuret of carbon, for half an hour, in the evening. To-day, in the afternoon, pain commenced suddenly in the right lower eyelid, as if bruised, first observed on touching the eyelid, and near to the outer angle; after a short time the same bruised feel in the upper eyelid came on, over the region of the lachrymal gland; the globe of the eye at the upper and inner part has the same bruised feeling; the pains are all aggravated by movement of the eye or lids, also by pressure; the eyelids of the same eye feel as if swollen, but are not so; the conjunctiva of the lower eyelid redder than usual, at the outer margin of the lid; sensation as if a sty would begin. Humming noise in left ear. The above feelings were all new to me, never having had anything of the sort before.

16th. The same lower eyelid hot, painful, sore, slightly swelled, rather red near the outer angle of the eyelid.

17th. Since yesterday, continued humming in left ear, extending to the back of the head; sty forming on right lower eyelid, hot and painful.

18th. Loud humming, like wind in the distance; left ear. Lower eyelid very red and swollen, more so at the outer edge; punctured the sty with a lancet, a small quantity of muco-purulent discharge came away. When talking, I feel obliged to raise the voice on account of the loudness of the noise in the ear.

² In the evening and during the night, always a feeling of fulness at back of head, with humming noise there; these sensations gone in the morning.

Yesterday took Pul. 3d without relief.

Drowsy day and night ever since exposed to the vapor of the Sulphuret of carbon.

Yesterday after dinner, and during dinner, feeling of deafness in the left ear, as if obstructed by a thick substance.

19th. Noise continues, worse after food; left ear rather deaf, and feels obstructed. Lower eyelid discharges yellow thick pus; this morning not so painful.

Took tincture of Belladonna 1st dil., a few drops yesterday, with slight relief to the noise in the ear; it returned, however, in the evening as bad as ever, with oppression at the back of the head. To-day took a few drops of tincture of Belladonna 1st dil., without the slightest relief.

20th. Noise in the ear not quite so loud. Vertigo this morning felt at the back of the head. Severe laryngeal, tracheal, and bronchial cough came on yesterday, continues to day, with soreness in the chest; expectoration of thick mucus this morning.

Took Merc. sol., 3d trit., gr. ii, and Phos. 3d, three hours afterwards.

22d. Cough continues, but not so severe; sneezing, running at the nose, with profuse discharge of thick mucus, lachrymation, and headache in the forehead and back part. Headache worse yesterday, this evening nearly gone. Noise in the ear much less, but still continuing slightly. Symptoms of the last two days like influenza.

Took Merc. viv., 2d trit.; Kali hydr., 1st dil., gtt. iv; Hep. sul., 3d trit.; one dose of each at various periods. Eyelid about well.

27th. No noise in the ear to-day, except a little before rising in the morning. No deafness; this is the first day since the noise in the ear commenced that I have been free from it. Still running at the nose, and cough first thing in the morning, getting easier by bedtime; ceasing entirely when lying; mucous rattle in upper part of left lung a few inches above the nipple. The right nostril bled a little yesterday and the day before.

30th. Rather loud noise in left ear, like gusts of wind through a funnel or hollow tube. Influenza continues; herpetic eruption on the upper lip.

May 3d. Noise in left ear has continued since last date, more intermittent, and not so loud. Cough, with expectoration of mucus. Mucous râle in the upper part of the left lung on first waking in the morning.

Took one dose of tincture of Bell., m. 1st, to day.

12th. Noise in left ear continues, other symptoms about gone. Very low-spirited from the first symptoms till yesterday.

20th. Noise in left ear, but less severe.

25th. Noise in the ear about gone.

28th. Another sty forming on right under eyelid. Noise in the ear heard slightly at times.

June 14th. Occasionally noise in the left ear.

July 5th. Noise in left ear returned yesterday, it has continued at intervals ever since; same noise as before.

The left ear continued affected for some months after this time by the morbid sound, but less in degree, and it finally ceased altogether.⁵⁹

CINNAMOMUM.

Authority. 3, Henry Von Musitis, M.D., copied from MSS; a woman took 40 drops of tincture in half a tumbler of water, at 2.30 p.m., March 6th.

Numbness all over. Stupefaction of the head immediately. Mouth, & blisters all over, at 7.30 P.M.

March 7th. Morning, very drowsy; heavy, unpleasant feeling. Headache, stupid, dull. Crossness. In the evening, no appetite; mouth and tongue sore, cannot eat on account of the soreness of the mouth. Face sunken, sickly look. Eyes deep in the sockets. Sleepy, no desire for anything. The abdomen feels sore to touch. A feeling as if her left leg were shorter, especially on walking. She thinks that the left side of her face is smaller. She imagines that the left side of the brain is shrunken. Backache. In the whole abdomen, a feeling as if everything were suppurating. Great bearing down in the genitals. Scanty yellow discharge from the vagina. Tongue very dry, without thirst, after eating.

March 8th. Morning, in the abdomen a slight tension and drawing from both ovarian regions, as if a thread were drawn in that direction. Head dull, left side seems smaller. Left eye seems smaller. Numbness all over the left side. The rawness and soreness of the mouth and tongue soon returned after rinsing the mouth with cold water. Fingers seem swollen. Symptoms seem relieved after breakfast.³

DIGITALIS.

Authority. 104, Drs. Flechner, Frankel, Schneller; and Winternitz, Zeit. der k. k. Gesel. der Ärzte zu Wien, 1847, p. 171, three men made a proving with the tincture, beginning with 2 drops and increasing to 160, and in one case to 400.

The small doses up to 30 drops, produced scarcely any effect except a bitter taste and some eructations; larger doses caused in two persons dryness of the lips, a feeling of rawness or burning in the pharynx, visible increase of saliva and mucus in the mouth, nausea, inclination to vomit, and a constrictive pain in the throat and along the œsophagus, with rumbling or griping in the intestines, and tension caused by flatulence; the stools remained unaffected in two provers, but in one became very dry and indolent, and in another, after 80 drops, there was sudden diarrhœa. The symptoms from 100 drops and upwards, were pressive pain in the forehead, obscuration of the eyes; in one case, oppressive pain beneath the ensiform cartilage,¹⁰¹.

NOTES AND CORRECTIONS.

For these we are largely indebted to Drs. Hering and Hughes.

AGARICUS.—Austrian provings by Zlatarovich, Zeit. d. ver. d. Hom. Ärzte (Est., 1863, 2, 1; Adler took 2d dec. dil., 100 to 300 drop doses, then tincture, 4 to 80-drop doses; *Adler's wife* took 2d dec. dil., 100 drops first day, 200 drops second and third days; *Rosalie*, sixty years old, took 2d dec. dil. daily, 100, 200, and 300-drop doses, then daily, tincture, 10 to 45-drop doses; *Baumgartner* took first 8th dil. (1-9), then 7th, 6th, etc., finally tincture, 20 to 400 drops; *Copainigg* took tincture, 5 to 10-drop doses (he seemed very sensitive to its action); *Wenzel* took tincture, 5 to

20-drop doses; *Huber* took 6th dil. (dec.), 5th, etc., down to tincture doses of last, 1 to 20 drops; *Kletzensky* took tincture, 5 to 10 drops; *Kraus* took tincture, a few drops twice; *Lundsmann* 300th dil., then 3d and 1st without effect, then tincture, 5 to 300 drop doses; *Lazar* took 20th dil., 190–300 drops; *Linck* took tincture, 10–25 drops, then 1st dil., 100 drops, one dose, then ten days later tincture, 15 to 80 drops, afterwards a fourth proving with 1st trituration of fresh fungus, 6–30 grains; *Max* took tincture, 5–15 drops; *Rosenberg* took tincture, 5 to 12-drop doses; *Schmidt* took tincture, 6 to 50 drop doses, symptoms only after 50 drops; *Scholz* took tincture 3 to 15 drops; *Wagner* took 2d dil., 1st dil., latter, doses of 10 to 150 drops, then tincture 10 to 200 drops; *Zeiner* took 1st dil., 5–20 drops, then 6th dil.; *Zlatarovich* took $\frac{1}{2}$ dilution 10 drops, then daily 5 drops, then tincture 5 to 270-drop doses, almost daily doses from 8th of June to 6th of November, then on 23d November began again with daily doses of 10 drops to 28th of February, then from 5 to 40 drops till 21st of March; *Zoth* took tincture, 10 to 200 drops, without effect.

Kretschmar, A. H. Z., 2, 62, proving by olfaction of the 2d dil., “on a cool summer’s day.” Symptom 1947 belongs to *Kretschmar*, and its authority is to be changed to 31.

Note to Symptom 727.—“The smell is not like that of horseradish, but like the offensive odor most people have after eating horseradish.”—*HERING*.

AGNUS CASTUS.—Symptom 25, transpose “eye” and “temple.”

Symptom 38, for “parts” read “places,” and for “side” read “place.”

ARGENT. NITRIC.—“*J.*” took, three evenings, a little of 1st dec. trit. in some water; “*K.*” took same, five doses; “*P.*” took same; “*M.*” took same, afterwards took in evening, 10 drops of 2d trit., three doses; “*K. M.*” took 2d trit. twice; “*M.*” afterward took 6th dil; “*N.*” took 30th dil.; “*M.*” also took 30th, two doses, longer proving; “*E.*” took 30th dil., two doses; “*P.*” took 30th dil.

Authority 52, Hering, a correction, not a proving.

Authority 53, Lembke, instead of “20 drops to a teaspoonful of” read “20 drops of.”

ARGENT. MET.—*Authority 9, Hering, N. Arch.*, 3, 1, 96, clinical symptoms, except symptom 204, from *Arch.*, 1, 186, produced by the 1st trit.

ARNICA.—*Symptom 104*, instead of “as if an extravasation of blood had taken place,” read “a feeling as if beaten bloody.”

Symptom 114, instead of “(after some hours),” note the headache appeared some hours after taking the root, the painfulness followed the sweat.

Symptom 194, for “with stupefaction” read, “benumbing.”

Symptom 859, “for lamenting” read “whimpering.”

Symptom 864, for “expulsion” read “escaping.”

ARUM TRI.—Symptom 42, for “same” read “pressing.”

Symptom 170, for “same” read “pressing.”

ASCLEPIAS TUB.—Symptom 37, for “upper” read “inner.”

ASAFOETIDA.—*Authority 6*, for “Trinks” read “Jahr.”

ASTERIAS.—Symptom 126, for “shoulder” read “elbow.”

ATROPINUM.—*Authority 1*, for “Eidherz” read “Eidherr.”

BADIAGA.—Symptom 8, for “7 A.M.” read “7 P.M.”

•**BAPTISIA**.—Corrections by D. C. J. Douglas, *N. Am. Jour. of Hom.*, 7, 228.

Add: “Inability to make any mental or physical effort.” “Tongue

dry, acrid, on rubbing it against the roof of mouth smarted and felt sore as if burnt."

Symptom 324, for "barn-floor" read "bare floor."

Symptom 324, for "the other side" read "either side."

BARYTA ACET.—Symptom 147, "fifteen hours" read "eight hours."

BARYTA CARB.—"Erase all of symptom 7."—HERING.

BELLADONNA.—Symptom 2312, for "worms in" read "warmth out of all the pores."

Note that all the notes to Bell. (not Hahnemann's) are by Dr. Hughes, as well as the illuminations of Hahnemann's authorities.

BENZOIC ACID.—Symptom 66, is clinical, the note to 67 doubtless belongs to this.

Symptom 175, also clinical.

BLATTA.—Symptom 20, for "right" read "left."

Add: Formication in toes, at 7 A.M.

CALADIUM.—Symptom 2, for "illness" read "vexation."

Symptom 57, instead of "the whole day" read "for many days."

Symptom 77, instead of "at" read "below."

Symptom 132, instead of "oppression" read "anxiety."

Symptom 134, for "shoulder" read "axilla."

Symptoms 158, 159, for "nettlerash" read "rash."

Symptoms 165, for "carbuncle" read "furuncle."

Symptom 179, for "everything" read "every noise."

CALENDULA.—Symptom 20, for "fourth day" read "for four days."

Symptom 15, for "before" read "behind."

CACTUS.—Symptom 212, for "band" read "hand."

CANTHARIS.—Add, **113**, Br. J. of Hom., 4, 91, effect on eyes, of making fly-plaster.

Eyes turned towards the nose,¹¹³.—Twitching of lids,¹¹³.—Smarting and burning in lids and around balls,¹¹³.—Great pain from smarting in lids, on closing eyes,¹¹³.—Lachrymation,¹¹³.—Great dimness of vision,¹¹³.

CARBOLIC ACID.—Symptom 427, for "splenitis" read "splenii."

CIMEX.—Symptom 3, for "dull" read "stupid."

Symptom 24, erase "liquid."—HERING.

Symptom 27, erase all following "a small piece."—HERING.

Volume III, page 636, fifteenth line from bottom, for "can" read "cannot."

Page 638, fourth line from bottom, for "J. Steining" read "Isenflamm-Steining."

Same page, second line from bottom, for "De Appons" read "De Appono."

Same page, ninth line from top, for 5 read 6.

Page 639, in BELLADONNA, for "2016" read "2014."

In BRYONIA, for "238" read "258." For "546" read "545."

In BAPTISIA, for "324" read "323."

CUPRUM.—Correction of note on page 4, vol. iv.

Hahnemann advised triturations of the pure metal, but included in his pathogenesis, provings with the acetate as well as the metal. It is, therefore, impossible to determine which of his symptoms belong to the metal and which to the acetate. All his provings therefore are given under the metal. Other provers, using, in part certainly, the acetate, are mentioned in the remainder of the note.

EUPHORBIA LATHYRIS.—For “*scrophulariaceæ*” read “*euphorbiaceæ*.”

HIPPOMANES.—Under “*Preparation*” erase “the veterinary.”
HERING.

HYDROPHOBINUM.—*Authorities*, erase “11 v.” (vide reference to other symptoms.—HERING.)

“B.,” Behlert on females.—HERING.

For “Pherson” read “Peterson.”—HERING.

Symptom 106, authority, Behlert, erase “16.”

Symptom 140, a cure.—BRAUNS.

Symptom 158, by Behlert, erase “9.”

Symptom 213, read “Feeling of coolness in mouth, as after peppermint.”

IODUM.—*Symptom* 16, instead of “about the future,” read “with the present rather than with the future.”

LYCOPODIUM.—Erase *symptom* 2048, and see *Silicea*, *symptom* 1233 and note.

MEZEREUM.—Note: A large number (569) of symptoms included in Hahnemann's schema were taken from Stapf's provings, *Archiv f. Hom.*, 4, 2, 119; these were made with tinctures partly of the dried bark, but mostly of the fresh bark, gathered early in spring (expressed, and the juice mixed with an equal part of alcohol). “Few of the provers took more than 8 to 10 drop doses of this tincture,” . . . “for a few provers, even a few drops sufficed.” Stapf's provers, were Hahnemann, V. Gersdorff, Gross, Hartmann, Casparé, Franz, Hartlaub, Schönke, Rückert, Tenthorn, “H.,” and “W.”

The editor is unable to compile the “*imponderabilia*” in a manner satisfactory to himself, or useful to the profession. The material on hand for such a work will be turned over to Dr. John Butler, who has made most careful re-provings of electricity.

Provings of the “lacs,” by Dr. Swan, are likewise left for separate publication; one (*Lac deffloratum*) has been published recently in the *Organon*.

